

Government of West Bengal

Directorate of Agriculture,  
Marketing Branch

**District Hand Book**  
on  
**Agricultural Marketing**  
for  
**the district of Midnapore**









## Foreword

This is the third volume of the series of district Hand Book on Agricultural Marketing. The earlier two other volumes, one for Howrah and another for Birbhum districts, have already been published. Besides discussion of marketing practices and problems of the district of Midnapore like previous ones, special chapter has been added on the agricultural development schemes and activities thereof.

The problems and practices on marketing have been generally discussed in the background of agricultural production and distribution. The District being mainly Rice growing one, the problems and practices have been discussed with reference to this major crop.

A few tables and appendices regarding the different problems and practices on agricultural marketing have been incorporated in the compilation to make it a little illustrative. The factual data have been compiled from different publications and compilations—a bibliography of which has been given at the close for facility of the general readers.

Thanks are due to Sri J. N. Hore, District Agricultural Marketing Officer, Midnapore (West), Shri S. B. Biswas, Superintendent of Agricultural Marketing, Eastern Range, Sri N. L. Pakrasi, Market Research Officer and some of the office assistants for rendering assistance in bringing out this compilation. The Government of West Bengal should not be regarded as assuming responsibility for any statements contained in the publication.

Writers' Buildings,  
CALCUTTA.  
The 9th Sept. 1966.

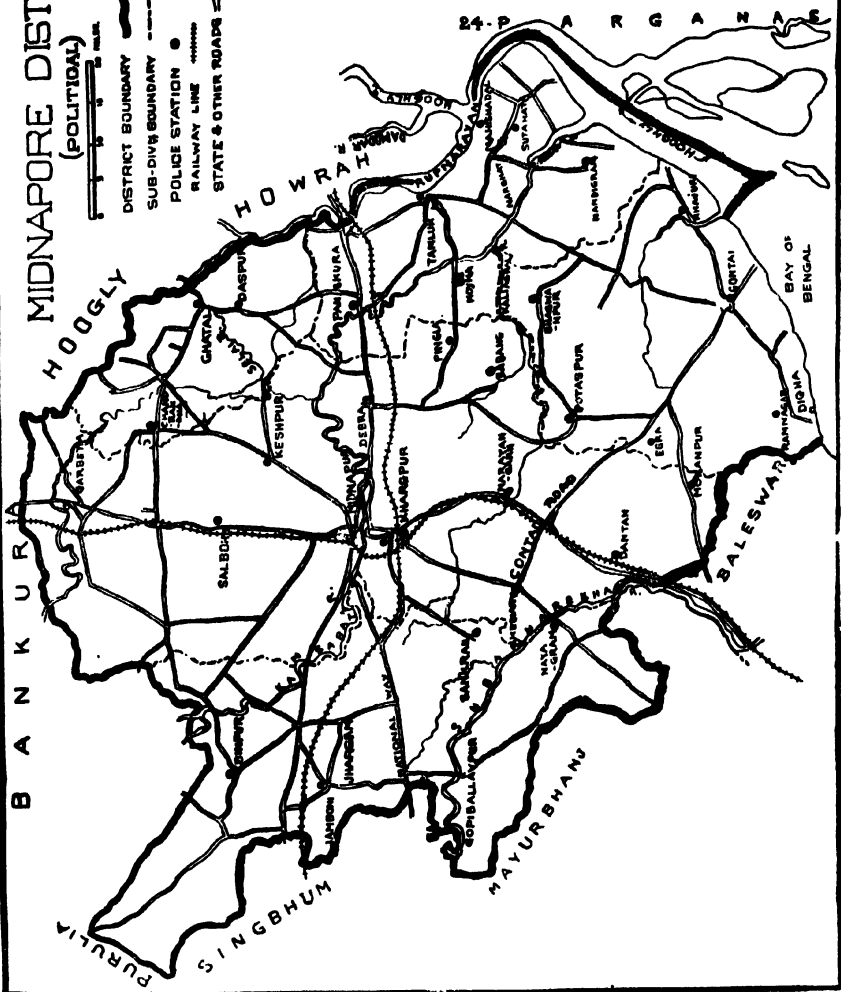
N. C. Ray.  
*Additional Director of Agriculture*  
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THE DISTRICT RECORDS OFFICE  
 1900  
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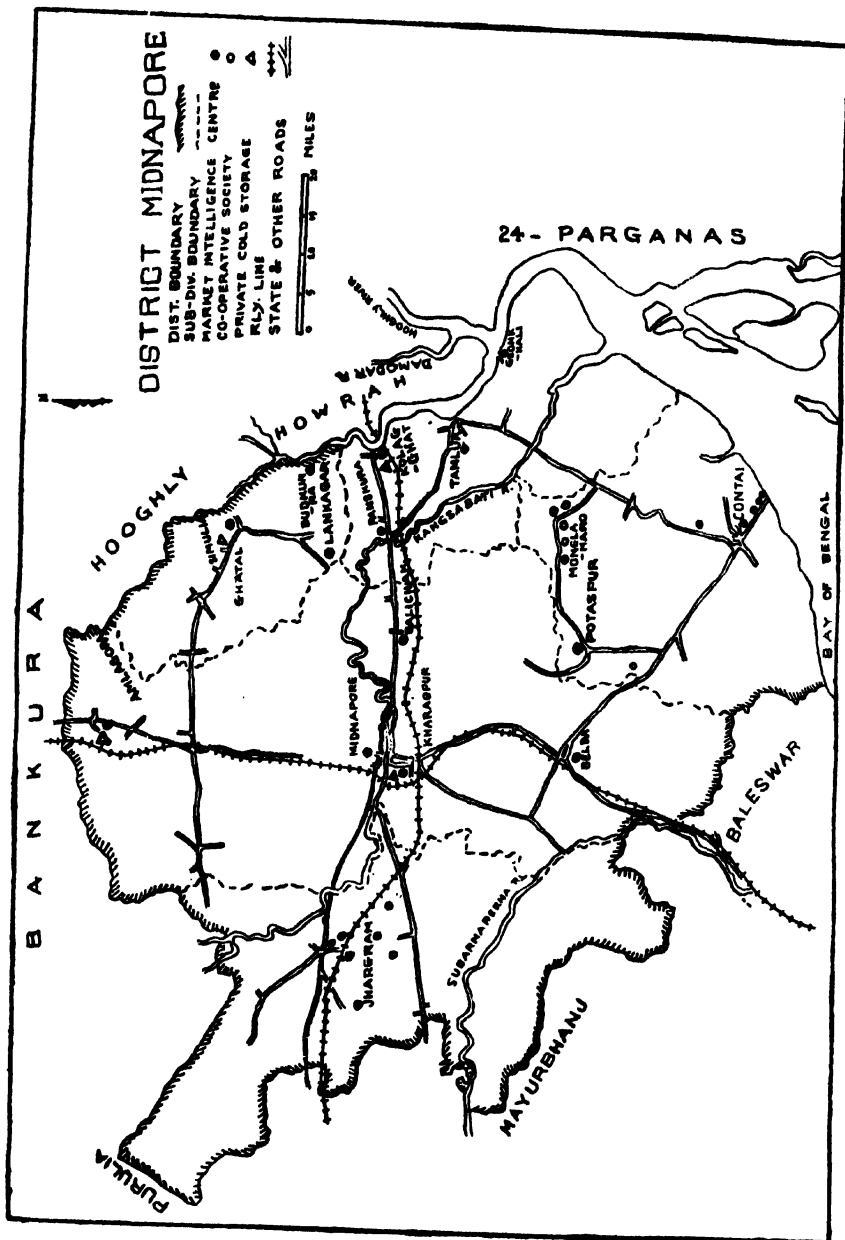
# MIDNAPORE DISTRICT (POLITICAL)

- DISTRICT BOUNDARY
- SUB-DIVISION BOUNDARY
- POLICE STATION
- RAILWAY LINE
- STATE & OTHER ROADS



24- PARGANAS

DIST. BOUNDARY  
 SUB-DIV. BOUNDARY  
 MARKET INTELLIGENCE CENTRE  
 CO-OPERATIVE SOCIETY  
 PRIVATE GOLD STORAGE  
 RLY. LINE  
 STATE & OTHER ROADS  
 MILES



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# CHAPTER I

## Physical Features

### Soils—Climatic Conditions—River System

1. The district of Midnapore, the southern most district of the Burdwan Division, is situated between  $21^{\circ}36'$  and  $22^{\circ}57'$  north latitude and between  $86^{\circ}33'$  and  $88^{\circ}11'$  east longitude. The name Medinipur may have been derived from "Medini" or Earth and Puri or Pur—the city, i.e. city of the Earth or better a good city in the earth. It is the biggest district even in the present West Bengal.

2. In the good old days the district formed a part of the kingdom of Tamralipta having Tamralipta (modern Tamluk) as the seat of the Kings. Tamralipta was then a great sea-port and a seat of learning. The country round was inhabited by Kaibarttas—a fishing and boating race. On the conquest of Kalinga by Asoka the district became part and parcel of the great Maurya Empire and adopted its civilization. The district subsequently passed under the Rule of Gupta Emperors, though the kingdom of Tamralipta survived for several centuries keeping its identity. When the Mohammadans appeared on the scene the river Damodar was the boundary between the Kingdom of Bengal and Orissa and Midnapore with the Arambagh sub-division of Hooghly district formed the frontier of the latter kingdom. Later on, Afgan king of Bengal annexed this area and formed it a part of the Kingdom of Bengal. But during the Mughal period in the sixteenth century, Midnapore again became a part of Orissa and during this period trade appears to have flourished. Though Tamluk lost its old importance, Hijli developed into great trade centre. Centuries rolled on when again during the early part of the 18th century certain very important administrative changes were brought in by the then ruler Murshid Kuli Khan and Midnapore became a part of Bengal.

Its peace and tranquility has all along been disturbed through internal strife, continual warfare and the 18th century was marked by the warfare between the Marahattas, Portuguese, French and British on one side and the then ruler Alibardi Khan on the other. Midnapore retained this character even through the nineteenth and twentieth centuries. During the Sepoy Mutiny of 1857 Midnapore was the only district in Bengal which matched a civilian revolt with the Sepoy rising. This spirit of revolt was again sparkled during the pre-independence days when the district created a history in the non-cooperation, civil disobedience and Quit India Movement. The activities of the revolutionary parties in the early 20th centuries for exterminating the British Rule were also characteristically a product of the Soil.

Owing to its geographical position, Midnapore is one of the most varied of the districts in West Bengal in regard to physical aspects. The north and north-west portions comprise of a hard laterite formation with undulating soil surface. Small hills of irregular shape spread over, extended upto the fringe of the Chotanagpur Plateau. This undulating soil surface disappears gradually running towards the east and giving place to flat surface of the eastern plains. This eastern portion has been formed out of the alluvial deposit of the Hooghly and its tributaries and is similar to other districts of West Bengal. The lands in this portion are comparatively low as also are those in the south. On the south-west and south, the country is a maritime tract subject to tidal waves of the sea. The lands in the south are more or less swampy and there are many embankments for protection against water-logging. In the south there are many sand-hills which spread over the entire coast of the Bay of Bengal.

4. Generally two types of soils are found in this district. The eastern portion of the district is mostly composed of alluvial soils. Locally the soils are named as entel (heavy clay) metal (clay) doyas, (clay-loam) doansh, doanshia (loam) bele doanash (sandy loam) bale, balu, balimati (sand). Soils in the marshy areas are known as pani mati and those of river silt are called palimati. Laterite soils are mainly found in the western area. These soils are mainly loam and sandy-loam. This area of the district is comparatively less fertile than the alluvial area. The clay soils in the alluvial area have certain sub-classes known as (i) ghara entel, (ii) nona entel and (iii) banamati or pashumati and (iv) dudhe entel. It is the only soil of sub-class (iv) that can grow rice while all others are mostly not suitable for cultivation. Saline soils of the southern part of the district are however comparatively richer and can grow a certain type of salt resistant variety of paddy. Results of soil analysis of soil surface from different parts of the district, reproduced from the Census District Hand Book 1951 may be found in the Appendix II (A).

5. The climate in the arid stretches in the north and west is characterised by a fierce dry heat in the hot weather, a short cold weather and a moderate rainfall. In the remaining part, the climate is not humid. Thunderstorm and cyclonic weather are regular visitors and usually prevail for a longer period affecting larger areas. Such storms are characteristically beneficial for crop production particularly for the kharif crop. These cyclonic storms have their devastating effect too. Such a storm came over to Midnapore district in the year 1942 and its fury was oddly felt in the districts of Midnapore and 24 Parganas. The storm created a havoc particularly in Midnapore district where roughly about 3'600 sq. miles were affected. Falling as it is within the Gangetic plain of West Bengal the district has normally all the climatic characteristic as are found in other areas falling within this zone.

5. 1. Generally, the monsoon starts from the month of June and lasts upto September or early October and the total amount of rainfall is not sufficiently adequate for the kharif cultivation. The total average rainfall of this district is 58°17' per year.<sup>1</sup> This area largely being an extension of Choto Nagpur range, the climatic condition of the western part of this district is almost equally hot and akin to that area, while that of the eastern part is almost similar to climate condition of the Gangetic area. The average monthly rainfall (in inch) in the district Head Quarter is noted below :—

TABLE--A

Average monthly rainfall in Midnapore

January	—	0'35
February	—	0'75
March	—	1'64
April	—	1'90
May	—	4'37
June	—	9'33
July	—	12'32
August	—	11'42
September	—	9'32
October	—	4'07
November	—	2'41
December	—	0' 2

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Total                      58'17

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B  
A  
N  
K  
U  
R  
A

# DISTRICT MIDNAPORE

DISTRICT BOUNDARY ———

SUBDIVISION BOUNDARY - - - -

RAINFALL IN INCHES:—

84.24" ▲

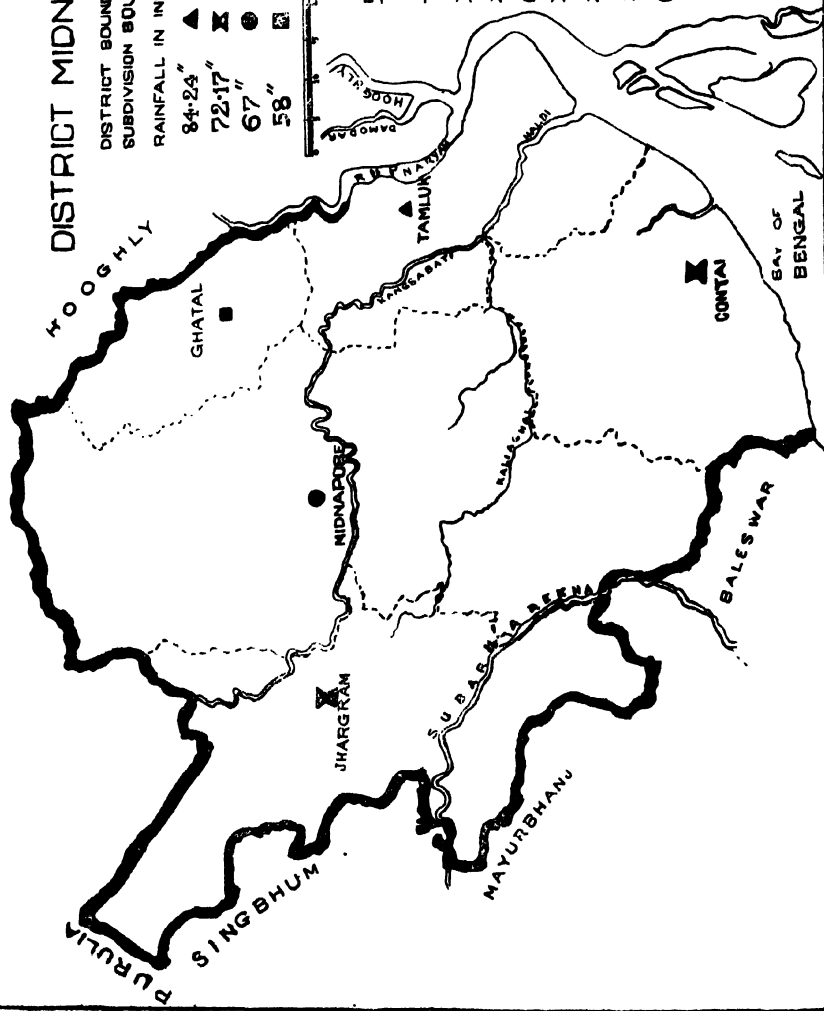
72.17" X

67" ●

58" ■

10 MILES

24- P A R G A N A S





5. 2. Number of rainy days of the district for the years 1957 to 1961 as recorded in Midnapore State Agricultural Farm is given below :-

TABLE—B

Number of rainy days during the last 5 years in Midnapore

Months	1957	1958	1959	1960	1961
January	1	4	—	1	1
February	7	2	—	7	—
March	1	1	7	—	—
April	—	4	4	2	2
May	3	6	6	5	6
June	14	9	10	14	15
July	17	20	22	25	12
August	21	17	20	22	19
September	12	17	20	16	16
October	4	9	14	7	6
November	—	3	1	—	—
December	—	—	—	—	—
Total :-	80	92	104	99	77

5. 3. The variability and special characteristics of the rainfall thereof in the district are due to prevalence of forests which constitute about 13% of the total area. It appears, the rain gauge recorded 62'54" in a year in Midnapore sadar south subdivision where forest area is almost insignificant compared to 80'13" under sadar north subdivision, the considerable portion of which covers forest area and receives adequate rainfall. The distribution of rain is also uneven as is evident from Appendix 1 (B). In cold weather months i.e. November to January the rainfall here is very small, "such rain as there is being due to the northward movement of cyclonic storm from the south of the Bay of Bengal. At the beginning of February local sea breezes commence, which increase in force and extend their influence further in land with the increasing temperature of the hot weather months. \* \* \* There occur periods of atmospheric disturbance usually called nor'westers. These thunder storms are accompanied by heavy showers but the rainfall is only 2" a month during March-April. In May there is rapid increase and the rainfall rises to over 5" inches. During monsoon months the weather condition in Midnapore are very much the same as in other parts of south west Bengal". (From Census Report 1951.)

5. 4. Agriculture in the district is mostly dependent on rainfall and is subject to vagaries of varied climatic condition. The rabi cultivation which is mostly dependent on irrigation as moisture retention capacity of the soil here is low, therefore, suffers in the district. Monthly distribution of rainfall from year to year, sub-division to sub-division and their percentage relation to total rainfall in the district may be found in Appendixes I, 1 (A) & 1 (B).

6. In Midnapore, where the surface soil is composed of red laterite and the hot westerly winds from central India blows, exceptionally high day-temperature is a feature of the hot weather months. The mean maximum temperature (1957-58 to 1961-62) is on average 88°F. in May, but begins to decrease steadily thereafter till it falls in December, to 50°F. Following temperature chart will illustrate the picture.

TABLE—C

Temperature chart showing monthly maximum and minimum temperature for the last five years

Months	1957 - 58		1958 - 59		1959 - 60		1960 - 61		1961 - 62	
April	114	79	103	80	105	80	110	75	110	75
May	118	79	109	78	106	80	112	77	110	80
June	116	73	109	84	94	80	101	77	104	74
July	98	71	94	81	92	80	94	73	96	70
August	100	70	91	82	88	80	96	77	90	76
September	101	70	92	80	N. Available		98	76	96	76
October	102	66	93	76	95	70	96	73	96	71
November	98	59	90	70	94	60	92	59	92	70
December	95	53	84	62	88	54	88	53	89	50
January	96	58	83	57	90	54	88	55	85	52
February	92	54	90	64	99	57	94	52	82	56
March	100	73	100	73	106	64	102	68	104	67
Average :-	103	67	95	74	87	63	96	68	97	59

Source : \* State Agriculture Farm Midnapore

6.1. It may be interesting to note from the table below the average variation in temperature. It will appear on an average "May" records highest maximum temperature in Midnapore while maximum temperature is lowest in the month of January.

TABLE—D

Average variation in temperature (in °F.) at Midnapore (i)

Station.	Variation in maximum temperature.	Variation in minimum temperature.	Variation between highest of maximum and lowest of minimum, temperature.	Variation between lowest of maximum and highest of minimum.
1	2	3	4	5
Midnapore	May, December, January (20°0')	June, December, January (24°2')	May, December, January (43°9')	(ii) June, December, January (-0°3')

6.2. Relative humidity has also its bearing on crop production. So it will not be out of place if a table in that regard is also appended. The table gives only an average picture. During rains humidity remains at 90% while in winter months relative humidity is less than 10% at times.

(i) Taken from A Brief Agricultural Geography of West Bengal.

(ii) Negative sign indicates that maximum of minimum is higher than minimum of maximum.

TABLE—E

Average monthly relative humidity (per cent) at  
Midnapore (mean of 8 hours)

Station	January	February	March	April	May	June	July	August	September	October	November	December
Midnapore	73	71	68	73	76	80	87	88	87	74	74	69

7. There are no reserved forests in the district but there are several Government plantations and protected unclassed forests. These forests consist mainly of small sal trees. Other trees commonly found in these forests are mahua, tamarind, palas, teak, sal, piasal and kusum, gazar, simul, accasia, casia etc. The jungle products consist of lac, tusser cocoons, wax-resin, dhatura, firewood and various jungle woods. Among marsh products may be mentioned the hogla bush which is used for making mats and for thatching, the sola plant yielding a useful pith. As per report of the Conservator General of Forest, West Bengal, in June, 1953, Government controlled 276,521 acres of private forest besides there being 117,091 acres of other private forest and 19891 acres of khasmahal forest. The Forest Department has also taken up for afforestation of 3008 acres of waste land and 1974 acres of private waste land vested in the Government for the purpose, in the district.

The coastal belts along the border at Digba, Junput, Nizkhashba and Khejuri are being stabilised by Jhow plantation. It gives protection to adjacent lands from bad effects of sand storms.

8. Midnapore district may be called a land of rivers as quite a good number of rivers, both big and small wash the soil of the district. The river Hooghly though she does not enter into the district, flows along the eastern boundary from the point where she receives Rupnarayan. This river Rupnarayan may be considered as the biggest river of the district. It flows in a south-easterly course and almost faces all eastern boundary of the district. The river is tidal though all the course it is not wide. In the upper course it is narrow but it becomes gradually very wide, at places it being about 2 miles. Next in order of importance is the river Silai or Silabati, which is a tributary of the river Rupnarayan. The catchment area of this river lies in Purulia. Its course is very tortuous and it is very deep in certain places. The river Buri is the largest tributary of Silabati and takes its rise in the north-west of the district. It empties itself into the river Silabati near Narajol. Another important river of the district is Cossye. The Midnapore town is situated on the bank of this river. It passes through the heart of the district and flows in a two-course run till one of its branches flows into Rupnarayan and the other meets the Kelaghai river. This continued course of Kelaghai and Cossye thus takes the name of Haldi and meets the Hooghly at north of Sagar Island. The river Kelaghai, another important river of the district, may be called a river of sorrows, as it causes devastating flood and carries on erosion. Still another river of the district is Rasulpur in Contai sub-division. It being a navigable river has economic importance; far more it protects against water-logging by the drainage it serves. The river Subarnnarekha also touches the Midnapore district and flows through Jhargram sub-division on its south-western course. Besides these important rivers this

district is also proud of having a very good canal system, serving both as a means of communication as well as source of irrigation. These canals are :—

- (i) Midnapore High Level Canal.
- (ii) Hijli Canal.
- (iii) Tidal Canal.
- (iv) Pratapkahli Canal.
- (v) Putrangi Canal.
- (vi) Kewari Canal.

9. With the development of modern communication system and the incorporation of development plans of constructing new roads and high-ways, the vast area of this district had been made communicable to the development of agriculture. Khargapur is one of the biggest and longest railway junction as well as an important railway centre of India. The lines viz., Howrah-Bombay, Howrah-Madras and Puri, and Howrah-Goomah pass through Kharagpur and, it is learnt that shortly some portions of the line would be electrified. A considerable quantity of goods including agricultural commodities are transported through this railway system. A new line it is understood, is proposed to be constructed, as it needs, for connecting the proposed Haldia port (in Tamluk sub-division, with Panskura) and that would also accelerate quick and cheap movement of agricultural commodities resulting in lesser marketing costs. Among the important roads, the Calcutta-Madras road popularly known as "Ahallyabye Road" passes through this district and is connected by several inter-district high ways and feeder roads, joining the industrial zones viz., Durgapur, Asansol and Jamshedpur etc. Besides, the following roads and highways viz., Calcutta-Digha road and Calcutta-Bombay road are under construction and the whole net-work of road system connected by innumerable feeder roads would greatly facilitate easy and quick transport for movement of agricultural goods to their consuming areas.

9.1. The distribution of Railway mileage in this district may be noted from the table given below :—

TABLE—F

Railway system in Midnapore District

Name of the Rly. Route.	Route and length upto district border.	Area covered by the route.	Remarks.
i. South Eastern Railway (Broad gauge)	a) Kolaghat to Gidney :	86 miles	Howrah - Bombay line.
	b) Kolaghat to Peardoba	88 miles	Howrah - Goomah line.
	c) Kolaghat to Dantan.	72 miles	Howrah - Madras line.

9.2. The details of the Road System in the Midnapore district may be found in Appendix - II

## CHAPTER II

### Area And Population

1. The district of Midnapore is bounded on the north by the district of Bankura, and on the east, the river Hooghly with its tributary, the Rupnarayan, forms a border with 24-Parganas and Howrah and Hooghly. On the south runs the long coast line of the Bay of Bengal, while on the west the boundary stretches separating the district from Balasore and Mayurbhanj districts of Orissa and Singhbhum and Manbhum districts of Chota Nagpur. This is the largest and the second most populous of the West Bengal districts. It has an area of 5258.50 sq. miles according to the Surveyor General of India and 5253 sq. miles according to the Director of Land Records and Surveys. Total area in acres of the district is 3361.8 thousand acres (quoted from Agril. Geography of West Bengal-Directorate of Agril.).

2. The district is constituted of five (but virtually six) sub-divisions viz. (i) Sadar north (ii) Sadar south (iii) Contai (iv) Ghatal (v) Jhargram and (vi) Tam'uk. Distribution of area of the sub-divisions in regard to area in sq. miles and area in acres are given in the table below :—

TABLE—G

Subdivisions - area in square miles and acres - head quarters  
according to census - 1951.

Name of sub-division	Name of Hd. Qrs.	Area in sq. miles	Area in acres
Midnapore Sadar (north)	Midnapore town	1069.9	684736.00
Jhargram	Jhargram	1185.9	758976.00
Ghatal	Ghatal	368.1	235840.00
Midnapore Sadar (south)	Midnapore town	968.1	619584.00
Tamluk	Tamluk	749.1	479424.00
Contai	Contai	911.6	583424.00
Total for the district :-		5253.1	3361,984.00

3. The Sadar north sub-division is constituted of the thanas of Midnapore, Salbani, Keshpur, Garbeta and Debra. The Sadar south sub-division has Sabong, Pingla, Kharagpur local, Kharagpur town, Narayanganj, Dantan, Mohanpur and Keshiari. The Contai sub-division consists of the thanas of Contai, Bhagawanpur, Potashpur, Khejuri, Ramnagar and Egra. The Tamluk Subdivision covers the thanas of Tamluk, Panskura, Moyna, Mahisadal, Nandigram and Satahata. The Ghatal subdivision consists of the thanas of Ghatal, Daspur and Chandrakona. The Jhargram sub-division has within its jurisdiction the thanas of Jhargram, Jambani, Binpur, Gopiballavpur, Sankrail, and Nayagram. This makes altogether 34 thanas in the district.

3.1. The areas of the sub-divisions have changed from census to census and such changes may be discernible from the following table reproduced from census District Hand Book of 1961 Census.

TABLE—H

Area in Midnapore, 1881 - 1951 (Area in sq. miles).

District and sub-division	1951	1941	1931	1921	1911	1901	1891	1881
Midnapore district	5253'1	5274	5245	5055	5186	5186	5145	5082
Sadar sub-division	2038'0	5057	2028	2010	2067	2068	2111	2144
Contai „	911'6	912	912	837	849	849	849	849
Tamluk „	749'1	749	749	667	654	653	610	620
Ghatal „	368'5	369	369	366	372	372	372	317
Jhargram „	1185'9	1187	1187	1175	1202	1203	1203	1152

4. There are 180 Union Boards constituted of 12,288 mauzas of which as many as 1,669 are uninhabited mauzas. The following table will indicate the distribution of villages in the different police stations of the district. (Figures are taken from Census, District Hand Book 1951.)

TABLE—I

( Total number of villages and towns ).

Subdivision	Police station	Number of villages	Towns
Sadar Subdivision	Midnapore	216	1
	Salhani	379	—
	Keshpur	518	—
	Garbeta	733	1
	Debra	454	—
	Sabong	221	—
	Pingla	170	—
	Kharagpur local	534	—
	Kharagpur town	—	1
	Narayangarh	437	—
	Dantan	301	—
	Mohanpur	98	—
	Keshiari	290	—
Contai Subdivision	Contai	553	1
	Khejuri	131	—
	Bhagawanpur	317	—
	Potashpur	273	—
	Ramnagar	258	—
	Egra	241	—



TABLE - I—contd.

Subscription	Police Station	Number of villages	Towns
Tamluk subdivision	Tamluk	185	1
	Panskura	354	—
	Moyna	83	—
	Mahisadal	171	—
	Nandigram	249	—
	Sutahata	198	—
Ghatal subdivision	Ghatal	140	2
	Daspur	243	—
	Chandrakona	243	3
Jhargram subdivision	Jhargram	482	1
	Jambani	275	—
	Binpur	805	—
	Gopiballavpur	483	—
	Sankrail	275	—
	Nayagram	297	—

5. The important towns of the district are Midnapore, Tamluk, Contai, Kharagpur, Jhargram, Ghatal, Garbeta, Khirpai, Chandrakona, Kharar and Ramjibanpore details of which are given below. Amongst the villages numbering more than 12 thousands as many as ninety may be said as most important. The names of those important villages of the district are given below :—

1. Digri	31. Rahora	61. Mathari
2. Keshpore	32. Nayagram	62. Gunj Narayanpur
3. Anandapore	33. Gopiballavpur	63. Nandkumer
4. Amsol	34. Chorchita	64. Mahisadal
5. Malighati	35. Salbani	65. Nutsal
6. Amlagora	36. Gidni	66. Kukurhati
7. Radhamohanpur	37. Radhanagar-Keudi	67. Sutahata
8. Debra	38. Dudkumdi	68. Anandapur
9. Goaltore	39. Birsingha	69. Teropakia
10. Hoomgarh	40. Narajole	70. Nandigram
11. Kharkusuma	41. Nimtola	71. Norghat
12. Loada	42. Sabong	72. Moyna
13. Belpahari	43. Temohini	73. Paramanandapur
14. Silda	44. Mohar	74. Khejuri
15. Sukjora	45. Pingla	75. Bhagawanpur
16. Ergoda	46. Mondamari	76. Potaspur
17. Andharia	47. Jamna	77. Ramgarh
18. Binpur	48. Karkai	78. Egra
19. Dahijuri	49. Jalchok	79. Deulbar
20. Lalgarh	50. Narayanagarh	80. Bhimeswari
21. Ramgarh	51. Belda	81. Mongalmaro
22. Chilkigarh	52. Kesiari	82. Itaberia
23. Chandra	53. Bagasti	83. Mirgoda
24. Chisra	54. Kukai	84. Sankrail
25. Manikpara	55. Danton	85. Salboni
26. Sardia	56. Mohanpur	86. Balichak
27. Kultikri	57. Panskura	87. Chandrakona Rd.
28. Beliabera	58. Kolaghat	88. Digba
29. Jambani	59. Mechada	89. Dashagram
30. Sankrail	60. Haur	90. Geonkhali

6. A brief account of the aforesaid towns and villages are given in the following sub-paragraphs :

#### 6.1. Midnapore Municipal Town :

The municipal town of Midnapore, which is an old city, is situated on the bank of Cossai, only 8 miles north of Kharagpur, a very important Railway junction station. It was the old seat of Kings in the reign of Hindus, Pathans and Mughals. It had a fort during the reign of the Mughal which was later on occupied by the Marhattas and subsequently ruined. Till recent years it was the Central Jail. Several places of pilgrims of both the major communities with temples and mosques, dargas, sherif khanas etc. do still exist to commemorate the spirit of toleration by its inhabitants. Midnapore has also got churches and some memorials of past Britishers. But above all, Midnapore is fortunate enough to have been blessed with the presence of Sri Chaitanya. The picturesque view of Midnapore town particularly surrounding the Railway Stations may attract any lover of beauty.

#### 6.2. Tamluk :

This is the present name of old Tamralipta of bygone days of the Buddhist period, once famous for the seat of a celebrated university and the existence of a port. A good harbour and navigable port as it had been due to its nearness to the sea, which at present has due to natural geographical changes gone far away. Recently, construction of the new port at Haldia not very far from old Tamralipta, has been decided to be begun and the satisfactory progress is going on. The old heritage of university is at present marked by the higher percentage of education in the sub-division. It is also an important business place.

#### 6.3. Contai :

This place bears the history of first salt Satyagraha in the early thirties as launched by Mahatma Gandhi and Deshpande Birendra Mohan Sasmal. The intensity of struggle for national freedom during its early days was the chief characteristic of the place and it has great political importance in these days. The salt industry — the Great Bengal Salt Industry and the Bengal Salt Factory is functioning well in that place.

#### 6.4. Kharagpur :

In the map of modern India, particularly in West Bengal, the name of Kharagpur is written in golden letters. It is 72 and 8 miles off from Calcutta and Midnapore respectively which is one of the biggest Railway junctions in India and is situated on the South Eastern Railway (formerly B. N. Rly.), Madras-Puri, Nagpur-Bombay and Adra-Purulia, these three separate Railway lines have been originated from this junction. The development of Kharagpur was mainly due to the Railway Workshop which is the biggest one in the S.E. Railway and consequently a new modern township has developed comprising of the Railway personnel. The population of Kharagpur has increased considerably.

The management of this township is looked after by the Rly. authority. It has got a market of its own. It has been developed in a planned way just akin to planned markets found in other metropolis of our country. It is the biggest assembling market of the district and the needs of other subsidiary markets are met from here both in wholesale and retail deals. Kalaikunda, an important landing ground and military base for Airmen, is also situated in this place.

6.5. Approximately three miles off Kharagpur, another landmark is coming into prominence in shaping the destiny of modern India. It is Hijli. In the days of our Independence struggle the name of Hijli came into lime light. The then Imperialist power maintained a detention camp at Hijli where the patriotic

inmates were put to inhuman torture. The place which was notorious for the tyranny and torture under foreign subjugators, has now become a cultural centre and one of the sacred places. In order to develop the country, our national Government felt that unless we can make advancement towards modern technology keeping pace with world, no advancement is feasible. Accordingly, an expert body was formed under the Chairmanship of late Sri N. R. Sircar and it was decided to establish four Technological Institutes in India. Hijli was selected for one of the same. For this purpose, the State Government released 1400 acres of land at Hijli with a few buildings and ultimately I.I.T. (Indian Institute of Technology) was established. The date was 18th August, 1951 and the venue was the former political detention camp. Since then the institute has progressed considerably during the 3 Plan phases.

Besides Graduate and Post-Graduate Courses in Science and Technology, the institute conducts a short-term Foundry and Training Course and Trade Apprenticeship Course. To man our different development plans and to set our country in the right place in the world, this institute produces about two thousands technologists every year.

#### 6. 6. Jhargram :

This place is situated at a distance of about 38 km. in the west of Kharagpur—and being within the Sal forests exhibits a beautiful panorama to the local people as well as to the health visitors. During winter it serves as a health resort. A Polytechnic School, a B. T. Training College, a Basic Training School for teachers and a Government College—Jhargram Raj College—are among the important institutions of this place of recent origin. This is a health resort and a center of education.

#### 6. 7. Ghatal Municipal Town :

The subdivisional town of Ghatal is situated on the bank of the river Silai, only 4 miles afar from “Bandar” an old port at the tri-junction point of the three rivers Silabati, Darkeswar and the Rupnarayan, where-from cargo valuing lakhs and lakhs of rupees were being exported to European Countries in the 18th and 19th centuries. It is also famous even at present for cottage industries of silk and cotton goods as also brass and bell-metal.

#### 6. 8. Garbeta :

Sarbamangala temple is one of the devoted religious temples of the Hindus and it enshrines the deity Sarbamangala by her special characteristics. A fair is held, generally at the time of Durga Puja—and attended by devotees and people of the surrounding areas. This is situated at Garbeta town, the extreme northern border of the district where also the relics of an old garh (fort) may be seen.

#### 6. 9. Khirpai :

It was under the kingdom of Maharaja Chandraketu of Chandrakona and was situated on the Kethia Khal, a branch of the river Silabati. At that time it was navigable. There were three daily markets in this town, namely (i) Kadam Kundi, (ii) Kachari bazar, and Mathaghat. It was a big port and assembling centre of weaving and brass and bell-metal goods. The merchants of different parts of India used to come here for trade and business. There are many old temples in this town. But none can say the date of establishment of them. Among these temples (i) Patharia Thakur, (ii) Umapati, (iii) Pancharatna and (iv) Gopinath Thakur's temples are remarkable, as specimen of Hindu architecture. But they are decaying.

#### 6. 10. Chandrakona :

In ancient time there was a king named Khaira Malla in this area (Mallabhum) nearly in the year 1400 Sakabda. He was subjugated by Rajput

Prince Chandraketu and he established the capital of his kingdom here after constructing a city like "Amarabati" and named it as Chandrakona. Maharaja Chandraketu fought against the "Prince Jara" one of the descendants of king Jarasandha of Magadh and completely crushed him and took possession of Jara's kingdom and thus the area of kingdom of Chandraketu spread over 80 sq. miles. A proverb says that at that time there was 'বাহাদুর বাজার তেপার গলি—' in Chandrakona town. After the death of Chandraketu a Chowhan Sardar, Birbhanu Singh defeated the descendant of Chandraketu and conquered the kingdom. It is learnt from one stone script placed in "Lalji temple" of Chandrakona that the queen Lakshuabati, the wife of Harinarayan Singh, one of the descendants of Birbhanu Singh, constructed this temple in "Akshay Tritia" day in 1577 Sakabda. In 1702 A. D. Maharaja Kirtichand Bahadur of Burdwan subjugated the kingdom of Chowhan Raja's with the help of Mughal army.

#### 6. 11. Kharar :

Shova Singh one of the descendants of Chowhan kings of Chandrakona established his kingdom in this place. His capital was at Radhanagore, and Kharar was the biggest producing centre of brass and bell-metal articles and assembling centre of weaving and brass and bell-metal goods.

#### 6. 12. Ramjibanpur :

Ramjiban Roy better known as Ramjibabu, the last of Dewans of the Chowhan King of Chandrakona fled from Chandrakona and began to reside at this place far from Chandrakona and named it Ramjibanpur. Weavers of Chandrakona and Khirpai also flocked here and Ramjibabu gave them shelter, furnished them with money and materials for earning their livelihood as weavers. Thus this place flourished as weaving centre. The brass and bell-metal articles were produced here also and the industry was developed to a degree.

#### 6. 13. Amlagora :

Formerly a fort in Garbeta P. S., and a seat of a king under the Malla dynasty, now degenerated, is one mile afar from Garbeta Railway station towards the north and two miles from Garbeta town and is at present one of the most important marketing centres.

#### 6. 14. Digri :

Situated 3 miles east of Chandrakona-Ghatal Road Railway station—is connected by tarred road, particularly famous for after-care hospital for the T. B. convalescents.

#### 6. 15. Goaltore :

An important marketing centre, 12 miles west of C. K. road, on way to Saranga (Bankura district) is famous for hand-loom industry.

#### 6. 16. Hoomgarh :

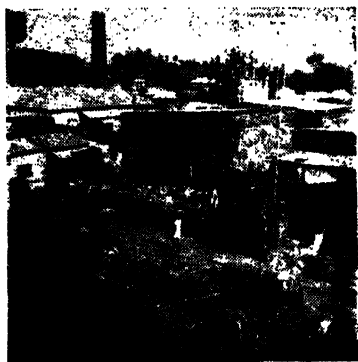
Once famous for its proximity to Garbeta fort, now being inhabited mostly by "Santals", is also a good marketing centre.

#### 6. 17. Kharkusuma :

It is a cultural centre of the P. S. having had old tradition and inhabited by some of the descendants of "Jadubhatta", and is also inhabited by aboriginals.

#### 6. 18. Amsole :

With the relics of the old kings in the proximity of Garbeta fort, it is between Garbeta and Chandrakona towns. The potentialities are now being harnessed by the transformation of soil on the adoption of contour-bunding.



A side view of Amlagora market



A panoramic view of a Primary market



**6. 19. Chandrakona Road**

A recently developed marketing centre at the crossing point of 4 roads from opposite sides besides a railhead, connecting Saranga—Ghatal and Vishnupur—Midnapore roads.

**6. 20. Godapiasal :**

Situated at 8 miles north of Midnapore town wherein the headquarters of the ex-Midnapore Zamindari Company was established. The place is gaining its importance with the increase of population in recent times.

**6. 21. Balichak :**

This is one of the most important markets for paddy and rice in Debra P. S. having had as many as 16 rice mills situated on the rail-head, connecting important market places of Debra, Pingla and Sabong P. S.

**6. 22. Keshieri :**

It is a village in Midnapore south subdivision and is situated at a distance of about 16 miles south-west of Kharagpur railway station and accessible by tarred road. It was once famous for tassar and silk products. There is an old temple of the goddess "Sarbamangala" which depicts the sculpture of the past. There is also an old fort named as "Kurambura" fort, three miles off from Keshieri proper.

**6. 23. Danton :**

It is a village situated at the distance of 32 miles from Khargpur town. It is the border Railway station of this state on way to Orissa. Legend says that while proceeding towards Puri, Mahaprabhu Sri Sri Chaitanyadev stopped here for brushing his teeth with the Neem stick (which in Bengali is known as Danton) and, as such, this village was named as "Danton". There is a very big tank of 5,000 ft. in length and 2,500 ft. in breadth and it is said this has been named as "Sarsanka Dighi" after the name of the king "Sarsankadev" who on way to Puri for pilgrimage excavated this at this border village of Orissa and Bengal. There is also an old temple of the god "Shyamsundar" which is also worth seeing.

**6. 24. Narayangarh :**

It is situated at a distance of 14 miles off from Kharagpur. The remnants of the old fort "Handolgarh" make one remember the old Royal family of Narayangarh. The Orissa Trunk Road passes by the west of this fort. It is said that Mahaprabhu Sri Sri Chaitanyadev, on his way to Puri, passed by this way. The Dhaleswar Shiba Temple and a big tank on an area about 200 bighas, named as Ranisagar, are also famous in this locality.

**6. 25. Belda :**

It is a village situated on the main road to link Khargpur-Contai. It is a big business centre in the rural area and principal crops like, paddy, rice, jute, betel-leaves etc. are exported from here both by rail and road. There are four rice mills in this locality. The railway station at this place was named as "Contai Road", because this station then linked the subdivisional headquarters of Contai by a kuntecha road before the present tar-macadam road with extension upto Khargpur was constructed.

**6. 26. Sabong :**

It is situated at a distance of 36 miles from Midnapore headquarters, linked up by all weather motorable roads. This is a jute growing area of Midnapore south subdivision. Cultivation of plants (locally called Madurkati) from which mats are prepared, is widespread here and, as such, the matting industry of this locality has developed appreciably. Even high grade mats are produced here.

### 6. 27. **Panskura :**

It is an important railway station, situated at a distance of 36 miles of Midnapore district headquarters. It is also linked up by motorable roads. It is an important exporting centre, specially betel-leaves are exported to almost all States of the country from here, and vegetables also in considerable volume are exported to the markets like Calcutta, Kharagpur and Tatanagore etc. There is a temple of Lord Siva known as "Samasaneswar" and another temple of "Raghunathjiu" or "Ramchandra" and Raghunathbati village at the distance of 2 and 4 miles from this place, and these temples are famous for pilgrimages. In every year big melas are held there on 'Chaitra Sankranti' day at the Siva temple and the 'Vijaya Dashami' day at Raghunath Jiu' temple.

### 6. 28. **Mohisadal :**

This is a village situated at a distance of about ten miles from Tamluk. It is a prosperous and enlightened village of this subdivision. It was the capital of an old Zamindar family, titled as 'Raja'. There is a big 'Rath' with 17 tombs belonging to the Raj family and every year at the time of Rathajatra festival thousands of people assemble here to witness the festival. The temples of 'Navaratna', 'Ramchandra', 'Gopinath', 'Singhabahini' etc. erected by the Raj family are famous and worth mentioning. There exists also a college, extending educational facilities to the rural people since a long time.

### 6. 29. **Mayna :**

It is situated at a distance of 9 miles from Tamluk. It is important only for its past historical back grounds. It is said that during 9th century there was a ruler named Karna Sen at Maynagarh, now known as Mayna. Lau-sen was his son, in the epic, written by Manik Ganguly and Ghanaram Chakraborty named "Dharma Mongal", the chivalrous activities of this Lau-sen has been described vividly. But at present, there exists hardly any remnant of their past glory. It is a compact area for growing of good qualities of jute.

### 6. 30. **Kolaghat :**

It is situated at a distance of 46 miles from Midnapore and only 34 miles from Howrah railway station. It is an important assembling centre. It is located on the bank of Rupnarayan river. Almost entire production of jute of this district and part of other neighbouring districts as well are assembled here and after baling these are transported to Calcutta market by rail and river. Business of wood and wood products also is predominant here. Hilsha fishes of Kolaghat have also created demand locally and outside.

### 6. 31. **Amarshi**

It is situated at a distance of 26 miles from Contai. It is famous for its hand-loom industry. Amarshi products, specially saries and dhuties, have profuse demand in the local and as well as outside markets. Recently the headquarters of Potashpore block has been located permanently at Amarshi.

### 6. 32. **Egra :**

This village is situated at 17 miles away from Contai town. There is an old Siva temple said to have been erected by Raja Ganapati-Mukunda Dev, a king of Orissa. Every year, a mela is held here on the "Sivarati Festival" days. Previously Subdivisional office was located here. When Bankim Chandra was the Sub-Divisional Officer, he held his office here.

### 6. 33. **Radhanagar-Kendi** (Sevayatan)

The village Radhanagar is 2 miles to the north of the Jhargram-garh or fort containing an ancient temple of the Raj family. About 3 miles east from



here is the village Keudi now christened as Sevayatan where there is a Junior Polytechnic School and a B. T. Training college.

**6. 34. Binpur :**

Situated at a distance of 12 miles from Jhargram having had direct road connection with Khatra P.S. of Bankura. It has earned its importance and has a big cattle market.

**6. 35. Chilkigarh :**

This was once the capital of a past king of Jharkhand and till recently the abode of one of the descendants, a Zamindar. The place is almost equally important like Gidni for forest produce besides a panorama of natural beauties.

**6. 36. Charchita :**

It is one of the cultured places in a far distant village from the hum-drum of a town and a remarkably important marketing centre for both agricultural and forest produce surrounding the area on the West Bengal—south Bihar border.

**6. 37. Chichra :**

This is one of the most important marketing centres for both cattle and agricultural commodities on the Bengal—Orissa border in Copiballavpur P. S.

**6. 38. Nayagram :**

Nayagram is a tongue of land which goes well into Mayurbhanj and Balasore of Orissa. It is about 60 miles via Lodhasuli-Gopiballavpur but only 20 miles from Kharagpur across the Subarnarekha. It is a thana headquarters and a old place of historical interest and a marketing centre.

**6. 39. Copiballavpur :**

This is the thana headquarters of the police station surrounded by the Subarnarekha river almost three sides, to the southern side of which starts a great jungle of Mayurbhanj and is an old historical place having affinity more with Orissa in culture.

**6. 40. Narajole :**

It is the seat of the old Raja of Narajole and is at present adjacent to the Lankagarh market, one of the most important markets for vegetables and fruits in the district.

**6. 41. Nimtala :**

Which is only 3 miles south of Ghatal is within Daspore Police Station and has got glorious past of its old silk and cotton handloom industry. It is told, it could compete with the finest quality of said cloth produced in Vishnupur and with the cotton cloth of Chandrakona or Ramjibanpur.

**7. Population :**

In the first census of 1872 the population of the district was recorded as 2,545, 179 ; but there has been a steady growth of population in the district since 1881 particularly along the sea coast and the estuary of the Hooghly, the number rising to 26,31,466 in 1891 to 33,59,022 in 1951 and 41,64,844 in 1961. The census reports also illustrate how different patterns have prevailed in different subdivisions and "at once indicate the Contai and Tamluk subdivisions as the most congenial to growth of population".

7.1 Such growth of population with their varied pattern of growth, problems and factors leading to such growth may be well indicated by an account of the following decades in the words of the Census Report 1951 which states :—

"Between 1870 and 1881 the whole of the north-eastern portion of this

district suffered severely from "Burdwan Fever." Between 1881 and 1901 the health of the district improved and the population on the whole made satisfactory progress. Although much ordinary fever existed in the badly-drained and flooded tracts, in other respects the health of the people showed a marked improvement and during 1891-1901 the district was peculiarly free from cholera and small-pox epidemics. The inauguration of the Bengal-Nagpur Railway from Howrah to Kharagpur, from Kharagpur to Balasore, from Kharagpur to Sini in 1898-1903, extinguished the major source of cholera which used to be introduced by pilgrims to and from Puri along with pilgrim roads. The railway benefitted the district in many other respects. By facilitating the disposal of the produce, prices rose, and the cultivators, who enjoyed a better fixity of tenure than in Bankura, were comparatively well off. During 1901-11 there were only three healthy years 1903, 1904 and 1908-10. Epidemics were persistent and widespread; cholera ranged in 1901, 1902, 1906 and 1907 and there was a virulent epidemic of small-pox in 1902. Fever, the most important element in the life of the district, was rife in the water-logged areas, and the out-turn of the crops was poor for several years. The volume both of emigration and immigration increased owing to the extension of the railway. The increase of population was small along the sea coast and the estuary of the river Hooghly. During 1911-21 the influenza epidemic caused great mortality and malaria took its usual toll. It is sad to reflect that the district as a whole and every police station except Khejuri, Ramnagare, Mahisadal, Nandigram, Satahata on the sea coast and Jhargram and Jambani on the Bihar border suffered from a decrease in population. The outstanding event of 1921-31 was the expansion of the Kharagpur railway settlement and an increase in the number of employees in the railway workshops, and an influx of unemployed relatives of employees from other parts of India. The next decade 1931-41 was noticeably eventful for the civil disobedience movement in 1931-33, drought in 1933-34 and scarcity in 1939-40. The district also suffered heavily between 1942 and 1945, causing depopulation in a number of police stations in Danton and Mohanpur in Sadar subdivision, Contai, Potaspur, Ramnagar and Egra in Contai, and Nandigram in Tamluk subdivision. This indicates that the coastal areas have not yet been able to recover from the combined effects of the cyclone of October, 1942 and the famine and epidemics of 1943-44.

8. The district is not only unique in its geographical feature, climatic condition and varied nature and classes of population but the distribution of population is also uneven. The following chart will illustrate the number of persons as occupant under different groups of holdings wherefrom it will appear that lesser the acreage, the greater the number of holdings and their occupants.

TABLE - J

Area of all cultivated land owned in acres	Total No. of persons in the group	Percentage thereof
0 to 1'00 acres	94,191	25%
1'1 to 2'00	76,853	20%
2'01 to 3'00	44,937	11%
4'01 to 5'00	30,416	9%
5'01 to 6'00	25,052	8%
6'01 to 7'00	16,257	5%
7'01 to 8'00	15,237	4%
8'01 to 9'00	12,618	4%
9'01 to 10'00	8,693	3%
10'01 to 15'00	9,242	3%
15'01 to 20'00	6,437	2%
20'01 to 25'00	5,994	2%
25'01 to 33'00	3,914	2%
33'34 to upwards	3,239	2%

8.1. Besides, variation in the distribution of population according to livelihood, classes is also a characteristic feature of the district which may be evident from the table given below :

TABLE - K

Classification of population according to livelihood.

Livelihood classes	Population		Percentage relation to total population
	1951	1961	
	42,59,022	43,41,855	
(i) Agricultural class			
(a) cultivating labour and their dependants —	4,54,173		70
(b) Non-cultivating owner of lands, agricultural rent receivers and their dependants —	20,672		12
(c) Cultivators of land wholly or mainly owned and their dependants —	17,20,223		6
(d) Cultivators of land wholly or mainly unowned and their dependants —	5,51,135		
(ii) Non-agricultural classes (persons including dependants who derive their principal means of livelihood from their dependants)			
(a) Production other than cultivation —	2,01,539		
(b) Commerce —	1,00,843		
(c) Transport —	61,250		
(d) other services & miscellaneous sources —	2,49,187		

Details not available at the time of compilation

(Compiled from Census Report — 1951 )

9. The population of the district is indicated thana by thana in the following table (Figures according to Census 1951)

TABLE - L  
(Population of the district thana by thana according to  
Census Report 1951 and 1961)

Name of Subdivision	Name of P. S.	Area in Sq. mile	Population	
			1951	1961
Midnapur Sadar (North)	Midnapur	130' 1	94,362	1,25,263
	Salboni	213' 3	68,266	81,024
	Keshpur	185' 9	85,856	1,15,398
	Garbeta	408' 4	1,50,115	1,93,982
	Debra	132' 2	69,090	1,08,053
Jhargram	Jhargram	208' 3	80,381	98,269
	Jamboni	126' 1	49,528	57,859
	Binpur	365' 1	1,36,933	1,56,411
	Gopiballavpur	184' 9	89,916	1,03,627
	Sankrail	106' 4	47,001	55,501
	Nayagram	195' 2	57,944	69,286
Ghatal	Ghatal	89' 80	84,670	1,14,469
	Daspur	127' 90	1,40,339	1,91,524
	Chandrakona	150' 80	86,373	1,16,036
Midnapore Sadar (South)	Kharagpur town	12' 9	1,29,636	1,47,253
	Kharagpur local	214' 4	95,722	1,34,289
	Sabong	120' 4	74,177	1,00,105
	Pingla	86' 3	50,363	71,609
	Narayangarh	194' 6	75,499	1,11,880
	Kesiari	114' 5	43,676	62,597
	Danton	170' 7	90,346	1,25,172
	Mohanpur	54' 3	30,550	40,839
Tamluk Subdivision	Tamluk	94' 0	1,42,038	1,82,962
	Mayna	57' 3	69,639	90,029
	Sutahata	127' 3	99,382	1,27,932
	Panskura	154' 7	1,76,405	2,36,537
	Nandigram	190' 9	1,59,584	2,02,591
	Mahisadal	124' 0	1,41,390	1,79,596
Contai Subdivision	Khejuri	164' 8	92,439	1,12,778
	Contai	196' 1	1,90,850	2,39,854
	Ramnagore	116' 1	1,03,602	1,34,292
	Bhagawanpur	140' 0	1,40,499	1,75,917
	Egra	155' 6	1,17,716	1,44,686
	Potaspur	138' 2	1,00,735	1,34,235
Total :		5,253' 10	33,59,022	43,41,855

9.1. The following table as reproduced from "Census of India Paper No. 1 of 1962" will give idea about the population of the district according to the Census of 1961. The table shows only the district total.

10. Variation in population in the district may be indicated in the table given below which has been reproduced from Census District Hand Book, 1951.

TABLE - N

(Variation in population during sixty years 1901 - 1961)

Year	Person	Variation	Net variation
1901	2,789,114	—	
1911	2,821,201	+ 32,087	
1921	2,666,660	- 154,541	
1931	2,799,093	+ 132,433	
1941	3,190,647	+ 391,554	
1951	3,359,022	+ 168,375	
1961	4,341,855	+ 982,833	+ 1,552,741

11. In regard to density of population, to quote from the District Hand Book of Census 1951, "Midnapore provides the most forceful example of how density of population in rural tracts directly varies with the fertility of the soil, and how the onward march of an overwhelming density of population abruptly stops short along a sharp line from end to end where the soil changes its alluvial and fertile character and becomes suddenly rocky and laterite—like a sharp line of rain work in a field upto which the clouds have shed their water and no further." Accordingly density is low in Midnapore Sadar (520) and Jhargram subdivision (390) while it is high in Contai, Tamluk and Ghatal subdivisions going over 800. Changes in density of population during the period of last 50 years may be studied from the following table :

TABLE - O

(Changes in Density)

1911 — 1961

( Based on Census District Hand Book — 1951)

Police station	1961	1951	1941	1931	1921	1911
Midnapore	963	725	691	577	534	601
Salbani	380	320	292	266	276	279
Keshpur	621	462	437	397	389	448
Garbeta	475	368	330	299	293	309
Debra	817	523	488	435	435	505
Sabong	831	616	594	592	630	743
Pingla	830	584	553	544	571	674
Kharagpur local	626	446	398	371	328	329

TABLE - O—contd.

Police station	1961	1951	1941	1931	1921	1911
Kharagpur town	11424	10049	6759	4507	3990	3996
Narayangarh	575	388	369	339	368	451
Danton	733	529	538	513	499	554
Mohanpur	752	563	568	518	525	583
Keshiari	547	381	361	331	353	310
Contai	1223	973	1028	851	898	900
Khejuri	684	561	558	468	367	361
Bhagwanpur	1257	1004	942	820	905	890
Potaspur	971	729	765	688	683	739
Ramnagar	1149	886	931	726	651	650
Egra	930	718	746	605	511	512
Tamluk	1946	1511	1405	1151	1052	1069
Panskura	1529	1140	1026	934	895	931
Mayna	1571	1215	1110	944	882	896
Mahisadal	1438	1132	1086	906	824	819
Nandigram	1061	836	869	735	677	676
Sutahati	1005	781	763	651	538	583
Ghatal	1275	943	940	844	793	928
Daspur	1497	1097	1006	926	931	963
Chadrakona	769	573	541	525	527	629
Jhargram	472	386	328	290	263	259
Jambani	459	393	362	332	301	296
Binpur	428	375	343	315	289	308
Gopiballavpur	560	486	467	429	379	407
Sankrail	522	442	424	390	344	370
Nayagram	355	297	285	262	231	249
Midnapore	826	639	607	533	508	537

11.1. It will be evident from the above table that the population of the district is unevenly distributed. According to Census Report 1951, "the causes of this uneven distribution are permanent. Ghatal and Tamluk lie on the east of the district and consist of fertile rice-growing alluvial plains, while the Hooghly, Rupnarayan and Haldi supply easy water carriage for the export of grains and the carrying of the trade. Contai, to the west of Tamluk lies on the sea coast, and there are large tracts of sandy or salt-impregnated soil. Conditions in the Sadar subdivision are different. Two thirds of it lie on the laterite plateau running down from Binpur and Manbhum and thus barren soil cannot maintain a large agricultural population, for large tracts are covered by Sal forest and jungle on which little impression has been made."

12. Mr. H. V. Bayley in his Memorandum of Midnapore in 1852 stated (as quoted in the Bengal District Gazetteer of Midnapore by Mr. L. S. S.

O'Mally I.C.S.), "The people of Midnapore proper are generally composed of an amalgamated race, who can neither be called Bengalees nor Oriyas, but who are a mixture of both...The people of Midnapore proper are of Bengal and Orissa." But in the words of Mr. L.S.S.O' Mally, I.C.S. "it would be more correct to say that the inhabitants of Midnapore are composed of these classes viz., pure Bengalees, Bengalee—Oriyas and aboriginal tribes." The Kaibbortas constitute one-third of the whole population. Bagdis are also prominent and the Santals are "more numerous than in any district in Bengal." The population is a 'Polyglot' one—a term used by Mr. O'Mally I.C.S. According to the Census of 1951, 3,014,102 persons speak Bengali, 1,70,607 speak Santhali, 52,573 speak Urdu, 43,289 speak Hindi, 28,197 speak Oriya, 24,983 speak Telgue and 8,752 speak Nepali. In the east and north of the district common language is standard Bengali. A corrupt form of Oriya is spoken in the south of the district. Apart from Brahmins, Kayasthas, Bagdis and Benias etc. there are certain castes whose predominance in the district is characteristic. These are Kaibbortas, Santals, Sadgopes, Madhyasreni Brahmans, Vyasokta Brahmans, Bhaktas, Dandamanjhis, Kadmas, Kasthas, Rajus, Tuntias etc. to name few of them.

## CHAPTER III

### Agricultural Geography

#### Land utilization—Crop production

1. The characteristic feature of the agricultural Geography of the district may be well described by reproducing a few paragraphs from the compilation by Mr. L.S.S.O' Mally, I.C.S. in his Bengal District Gazetteer of Midnapore district.

"The south and east of the district are an alluvial tract similar to most districts of the Gangetic plains in lower Bengal. The rainfall is comparatively greater than in the up lands to the north, and the soil, which consists of sand and clay brought down by the great rivers from the country above, produces abundant crops of rice. Along the sea-coast, and in the low-lying country, traversed by tidal rivers and creeks, it is necessary to raise embankments called bheris to keep out the salt water. Other rivers are, liable to sudden freshets after heavy rainfall in the neighbouring hills, and their beds being in many cases higher than the cultivated lands, are apt to overflow and cause serious damage to standing crop when such inundation occur, large areas are laid waste by deposits of sand, while the lower ground is converted, for the time being into a lagoon. To keep out these floods, many embankments have been constructed round considerable areas, called circuits. Cross-dams are also erected in the beds of most of the non-tidal rivers which are mere streams in the dry weather, in order to divert the water to the cultivated lands in their neighbourhood. Much of the alluvial tract is consequently covered with a net work of embankments and cross-dams, one result of which has been to restrain the action of the tides and so to cause the mouths of the river to silt up consequently after heavy rainfall the drainage is imperfect and large tracts are waterlogged.

"The North and west of the district consist mainly of a laterite upland tract, sloping upwards towards the Chota Nagpur plateau, and still largely covered with scrub jungle, in which the best sands are found at the bottoms of depressions between successive ridges. These low lands are highly valued, both because they form catchment basins retaining moisture, and also because the soil is enriched by the detritus washed down from the slopes. Rice is grown in such depressions as well as along the slopes of ridges. There is much terraced cultivation on the latter, the fields being laid out in a series of steps each higher than the other. They are enclosed by small artificial banks by means of which water is retained and allowed to drain off on to the fields below. Speaking generally, the soil in this part of the district is on the whole poor, being composed of laterite and coarse sand sometimes cemented together in a coherent mass at other times remaining loose and gravelly and passing by various gradations into sandy clay with a few ferruginous modules."

2. It will appear from the paragraphs quoted above that embankments and drainage are the major problems of the district which are being handled from days by gone but still remaining as baffling as before. Long before the British came



to India, an attempt had been made to grapple with the problem and individual Rajas and Zamindars had erected embankments at various places on both sides of river to protect individual villages or tracts of cultivated country from its devastation. But there were no concentrated action and long neglect of embankments and drainage by this Zaminders necessitated the Embankment Act VI of 1873 which was the first legislative measure of its kind. From the beginning of the 19th century the responsibility of maintaining the important embankments rested with the Government, the expense of some of them being always borne into entirely by the Govt. while for others the cost was recovered from the Zaminders. The Act of 1873 specifically demarcated the boundary of responsibility and schedule 'D' embankments had been the sole responsibility of the Government. This policy on embankments served at a first glance a natural and obvious one. But gradually this policy on embankments created a further more acute problem of drainage. The first step to deal with this problem was taken in 1899 when a Committee was appointed to enquire into and report "on the state of affairs in the part drained by the Rasulpur and its affluents." *But its recommendations became very little effective.* The question again gained prominence in 1913 and another thorough enquiry was conducted under orders of Government by the Superintending Engineer, South Western Circle, who made recommendations for dealing effectively with the problem. "It may be admitted that the situation confronting the early administrations as the result of the frequent flood was a distressing one, but other solutions might have been found in the direction of regulating instead of totally excluding the flood water while for the policy of forcing the sea to give up land which would in course of time be rendered available by the action of natural forces there is still less to be said specially as there was not thus much pressure of population as to render it imperative to extend the area of cultivation without delay." (Census District Hand Book 1951). The problem still remains to be tackled.

3. Of no less importance is the problem of irrigation in the district. Average annual rainfall as we have seen is 58.17 inches having 67.93 number of rainy days. Cultivation in the district mostly depends on rainfall and there are long and frequent draughts in the Western and Northern portions of the district. Jhargram subdivision is extremely dry and suffers greatly from the absence of adequate irrigation facilities. Nevertheless no stone has been left unturned for both increasing the areas and yield by application of various irrigation processes and taking together all types of irrigated areas, Midnapore has the largest irrigated area received from all the sources like Government canals, private canals, tanks and wells. Though there is general antipathy against irrigation facilities made available by Government since this involves water tax Midnapore district gets most of the benefits of irrigation from Government canals. Besides Midnapore also covers some 75% of the irrigated areas by private canals and during the period of five years ending in 1954-55 about 71.0 thousand to 3.00 lakh acres have been irrigated by private canals. Tank and well irrigation also contribute a major share of irrigated area in the district and tank irrigation is widely practised.

3.1 The main source of irrigation in the district is the Midnapore high level canal which takes off from river Kasai near Midnapore town and flows down to river Hooghly passing through Uluberia. Areas irrigated by this canal mostly grow Aman paddy, 90% being sown broadcast. Outturn per acre in this area fed by the canal has been estimated to be about 23½ maunds of paddy and 69 mds. of straw when irrigated while it is 20½ mds. of paddy and 54 mds. of straw in non-irrigated lands. Water for irrigation is also obtained by means of embankments built across drainage slopes and low-lying depressions.

3.2 Effects of irrigation may be evident from the table below.

TABLE-P  
Total area irrigated by different means of irrigation  
(1950 - 51 to 1957 - 58. In 000 acres)

Year	Govt. canals	Private canals	Tank	Wells	Other sources	Total
1950 - 51	35'1	232'1	46'3	5'0	135'2	453'7
1951 - 52	48'2	255'6	62'1	6'2	154'3	526'4
1952 - 53	54'1	270'3	70'5	9'1	162'0	566'0
1953 - 54	62'6	310'0	99'7	11'0	190'6	673'9
1954 - 55	88'0	288'0	98'0	6'0	140'6	620'0
1955 - 56	112'0	302'0	95'0	3'0	120'0	632'8
1956 - 57	118'0	315'0	102'1	5'0	125'3	665'4
1957 - 58	132'0	335'2	125'2	25'3	157'6	775'3

3.3. Table given below shows the area under different crops that received irrigation. It will be evident that some 85% of the total irrigated area comes under rice. Next in importance comes other food crop, while almost whole of the sugarcane area comes under irrigation.

TABLE-Q  
Crops irrigated and area irrigated under each  
(1950 - 51 to 1957 - 58. In 000 acres)

Year	Rice	Wheat	Other cereals including pulses	Sugar-cane	Other food crops	Other non-food crops	Total
1950 - 51	422'6	3'7	8'7	6'7	12'0	—	453'7
1951 - 52	488'6	2'4	11'0	4'4	18'0	2'0	526'4
1952 - 53	523'7	0'9	13'7	3'5	21'0	3'0	566'0
1953 - 54	613'5	1'7	22'2	2'2	29'3	5'0	673'9
1954 - 55	542'7	1'3	29'1	2'3	35'2	10'0	620'6
1955 - 56	547'3	2'9	32'3	2'3	36'3	11'7	632'8
1956 - 57	575'9	0'9	34'1	2'4	38'7	13'4	665'4
1957 - 58	667'6	1'2	42'1	4'0	43'9	16'5	775'3

4. The average agricultural holding or arable land in the district excluding forest, rivers, unarable land and dwelling houses etc. is slightly more than one acre per capita. Only about 65% of the total land is available for cultivation and the remaining lands are constituted of important forests and vast terrain. A great amount of development in the form of reclamation of lands, irrigation works and redistribution of lands have taken place to decrease the ever increasing pressure of population as well as to bring an all round development. But picture of land utilisation changes from year to year. Waste lands are reclaimed, roads buildings and irrigation projects cover new areas from year to year, more and more areas come under double cropping and lastly cropped area changes from year to

year under changing weather condition and agro-economic situation. So land utilization pattern is not a constant feature. The following table shows the land utilization in the district.

TABLE-R  
Land Utilization

Items	1954 - 55 in thousand acres
(a) Total area of the district	3,362'0
(b) Area under forest	—
(c) Area not available for cultivation	690'0
(d) Other uncultivated land excluding current fallow	253'0
(e) Current fallow	219'0
(f) Net area sown	2,200'0
(g) Total cropped area	2,315'0
(h) Area sown more than once	115'0

4.1. From the table above it is clear that Midnapore possesses a large cropped area and "provides with largest cropped area and next to it comes 24-Parganas. 31'99% of the net cropped area and 30'61% of the total cropped area of the State are in these two districts". Besides 70 to 72% of the total geographical area in the district comes under net cropped area while about 4'75% remains as current fallow. But cropped area does not remain constant over years. "It fluctuates with the prevailing weather conditions and agro-economic situation". But the unusual trend of utilization of average cropped area by different crops may be indicated as below :—

TABLE-S  
Utilization percentage by different crops

Aman paddy	82'15%
Aus paddy	5'46%
Boro paddy	0'18%
Wheat	0'08%
Pulses (Rabi & Kharif)	5'14%
Gram	0'21%
Potato	0'45%
Sugarcane	0'19%
Rape & Mustard	0'41%
Jute	1'34%
Others	4'39%

4.2. Table 'T' below gives an idea about the distribution of cropped area in the district. "The position of area sown more than once is changing gradually in different districts. In a State like West Bengal where effort is being made constantly to improve upon and expand the irrigation facilities, only an average estimated over years, cannot present the picture properly. At the same time it is also true that the position, in general cannot be studied with reference to yearly estimates for neither irrigated area nor area sown more than once depends only on the available irrigation facilities. As such, estimates of irrigated area need be studied with reference to weather conditions and the command area (i.e. area capable of receiving irrigation facilities) of the different irrigation projects" (Reproduced from Agricultural Geography of West Bengal—Directorate of

Agriculture ) However, the table below will indicate the area sown more than once in the district as percentage to the corresponding net cropped and total cropped area of the district.

TABLE—T

## Distribution of cropped area

District	District area as p. c. to the total area of the State	Net cropped area of the district as p. c. to the net cropped area of the State	Total cropped area of the district as p. c. to the total cropped area of the State.	Area sown more than once as p. c. to the corresponding cropped area in the district.	Net cropped area as p. c. to the total area of the district.	Current fallow as p. c. to the total area of the district
				Net cropped area	Total cropped area	
Midnapore	16'92	19'14	17'86	5'44	5'16	67'20 4'75

( From Agricultural Geography of West Bengal )

4.3. It will be evident from the above table that in Midnapore only 5'44 percent of the net cropped area is utilized as area sown more than once. For the State as a whole only 12'97% of the net cropped area and 11.48 percent of the total cropped area are utilized as area sown more than once.

5. As is common in Bengal, agriculture has got two seasons in the district viz. kharif which starts from March-April and extends upto October and Rabi which commences from September-October to end in February-March. The characteristics of the district are however so varied that when in one corner the season of kharif commences early in March viz in the river belt zone of the Ganges and Rupnarayan, such season commences even as late as May-June being exclusively dependent upon monsoon in areas like Garbeta, Jhargram etc. The main kharif crops are paddy and jute the former being the most important crop of the district. Amongst Rabi, potato heads the list and has got unique position, though the production of seasonal vegetables, pulses, wheat, oil seeds and betel-leaf are no less important. Besides, cashewnut, ground-nut, and sugarcane occupy conspicuous position. Moreover though Aus and Boro are largely grown in high tracts and marshy land respectively, the Aman paddy occupies more than 2/3rd of the acreage under paddy, Both broadcasting and transplantation are adopted in Aman cultivation.

Double cropping is also resorted to particularly during very recent years in suitable areas. The Olitorious jute predominates over Capsularies—the latter being grown only in the eastern part. But the acreage under Mesta is gradually increasing, its cultivation and marketing costs being lesser. Though full attention has been given to cultivation of paddy to cope with the food problem, the cultivation of jute is also being equally encouraged as it is the highest Foreign Exchange earner. Besides these, betel-leaf is the most important cash crop in addition to jute, Cultivation of Sisal has recently been introduced as a suitable

fibre crop since soil and climate have been found on research as congenial to its cultivation.

6. Estimated area under principal crops, estimated average yield per acre and average production in the district are given in the Appendices V, VI & VII. The estimates have been given for the years 1954-55 to 1961-62.

6.1. In consideration of area covered by different crops, rice is far the most important crop grown in the district and of rice Aman contributes the major portion. About 21.42 percent of the total production of rice of West Bengal comes from Midnapore district and about 21.49 percent of the total area under rice in the State lies within this district. In West Bengal about 88.96 percent of the total rice production is constituted of Aman rice and out of this total production of Aman rice about 22.86 percent is contributed by Midnapore district. These figures are quite significant. In respect of Aus and Boro, however, Midnapore is more or less out of reckoning its contribution is only 9.64 percent. Aus variety of rice contributes 10.62 percent of the total rice production of the State. About 10.88 percent of total Boro production in the State comes from Midnapore district. "This brings out the importance that is being attached to rice cultivation."

7. The following table indicates the period of sowing and harvesting of the principal crops of the district.

TABLE—U  
Sowing calendar

Name of crop		Period of sowing	Period of harvesting
Rice	Aman	June-August	November-December
	Aus	April-May (Broadcast)	July-Aug. (Broadcast)
		June-July (Transplantation)	September-October (Transplanted)
	Boro	December-January	May-June.
Wheat		September-October	March-April.
Jute		April-May	August-September
Sugarcane		February-March.	November-December
Potato		November-December	February-March.

8. The seed requirement of the different principal crops grown in the district is shown below :

Paddy (broadcast)	...	30 seers per acre.
Paddy (Transplantation)	...	12 seers per acre.
Wheat	...	30 seers per acre.
Jute	...	3 seers per acre.
Sugarcane	...	10,000 cuttings or 50 mds. per acre.
Potato	...	9 maunds per acre.

## **CHAPTER—IV**

### **Agricultural Development Programme in the District of Midnapore.**

In a country like ours whose dependence on Agriculture has not appreciably changed despite industrial progress of last decade and whose economy is and will be for several decades to come dominated by agriculture, National Welfare will largely depend on agricultural prosperity. The gaps in our rural life and agriculture are too many and too important to admit of delay or complacency. Our agriculture is at least to the extent of 50% carried on in conditions of uncertain rainfall and depleted soil conditions which affect its out-put and economy and the agriculturists can be more or less assured of the results of his labour and investments only in not more than 40% of the area under cultivation.

1.1. In the context of the above background, planned agricultural Development acquires such greater importance that in appreciation closely integrated and harmonising by blended pattern of development was thought about for rural upliftment.

1.2. Experience in the first Two Plans and specially in the Second, has shown that the rate of growth in agricultural production is the most important determining factor for the progress of entire economy. The Third Plan, therefore, recognises once again the priority for agriculture.

1.3. Production of food grains as usual, has claimed top priority. There has been great demand for food grains during this period for various obvious factors. To match this demand efforts have been made to draw production programme so as to utilise maximum possible land, water, man-power, fertiliser, finance and other resources.

1.4. On this consideration, a target of additional production capacity of 2,30,000 metric tons of Food grains have been fixed for the district during the years 1962-63 to 1964-65. Increased production plan of this order has been worked out in the assumption that the various development programmes will be carried out efficiently with wide spread public participation and fullest use of man-power and national resources through integrated efforts. The main programme for increasing agricultural production which involves intensive work relates to Irrigation, Soil Conservation and Land Reclamation, Supply of fertilisers and manures, seed multiplication and distribution, Supply of Improved agricultural implements, Plant protection and Adoption of Scientific agricultural practices.

### **2. Irrigation : Minor and Small Irrigation Scheme**

Small and minor irrigation will play an important role in agricultural Development Programme during the Plan periods. Already four schemes amounting to Rs. 56,039'00 under the minor irrigation schemes have been taken up for execution. This will command an area of 5,300 acres. Ten numbers of River Pumping Schemes amounting to Rs. 95,160'00 will be executed to augment the irrigation facilities in the district. Apart from this, forty six such other schemes are under scrutiny.

### **3. Small Irrigation Schemes**

During the year 1961-62, 36 Nos. of small irrigations schemes were executed at a cost of Rs. 1'05 lakhs benefitting an area of 9,000 acres. In 1962-63, 92 nos.

of small Irrigation schemes at a cost of Rs. 3'03 lakhs benefitting an area of 23,000 acres were executed. In 1963-64, 170 Nos. of small Irrigation Schemes at a cost of Rs. 6'00 lakhs benefitting an area of 16,000 acres were also executed in Midnapore district. 29 Nos. of Deep Tube Wells have been installed to provide irrigation to 4,350 acres in the whole district and 22 Nos. are under proposal.

3.1. 61 Nos. of Ring wells and 65 Nos. of Auto Tube Wells have been completed to cover an area of 500 acres approximately. In this tract of the land where water becomes a serious limiting factor above nature of schemes will offer ample opportunities for diversification and judicious utilisation of the water. With hard labour and toil, and with a change of suitable crop pattern, 2 to 3 crops can be raised. In addition to completing the various existing projects, the overall district Plan includes a series of small and large irrigation schemes. These comprise further exploitation of ground water, interception of storm water run off, reclamation and utilisation of springs and rivers. In 1961-62, 44 Nos. of pumping plants were distributed in the District.

#### 4. Soil Conservation

Problems of soil erosion and land utilisation are being tackled by separate sector of the agricultural Department in the district. Soil conservation benefits have been extended to 1,300 (approximately) acres, and various agricultural aspects of the river basins are being studied by the experts. Soil conservation Research Station has been established in Midnapore for studying related problems in the field recently.

4.1. There are instances where the destruction of the land has reached the stage where economic recovery is now considered very costly. Reclamation loans are being offered to the cultivators to stabilise these again. Mechanical unit is also available for proper reclamation of these type of lands.

#### 5. Supply of Chemical Fertiliser and Manures

On account of cultivation for a long period and due to the nature of the tract, the soils are at a very low level of fertility. There is an almost universal need for nitrogen. Soil is also extremely responsive to other major nutrients.

5.1. Apart from directly resulting in increased crop yield, the use of fertilisers will open up channels for scientific methods and changed pattern of agriculture by sustained efforts of the Extension Wing. Cultivators are becoming fertiliser conscious progressively, particularly in the irrigated areas.

Target for the year 1963-64 are indicated below :—

#### FERTILISER

1. A. Sulphate	...	7175 M.T. (Metric Tons)
2. S/Phosphate	...	1100 M.T.
3. Paddy-Fert. mixture	...	7450 M.T.
4. Potato-Fert. mixture	...	8050 M.T.
5. Bone meal	...	172 M.T.
6. Uria	...	2016 M.T.

The target for 1964-65 has also been fixed as follows :

Amonium Sulphate	...	20,000 M.T.
Uria	...	6,000 M.T.
Bone-meals	...	3,000 M.T.

There are 713 nos. of depots and sub-depots which have since been opened in the district to feed the needs of the area.

## 6. Manures :

For increasing production both chemical fertilisers and organic manure are required and it is not possible to meet the requirement of chemical fertilisers due to lack of enough production in the country as at present. Definite plans are being formulated to utilise the local manurial resources with fullest extent. In order to secure better results, cultivators are being given encouragement by advancing financial assistance for preparation of Compost pits, cow sheds etc. Cultivators are also being encouraged to grow different plants for organic manuring-materials. Target of Farm Manure for 1963-64 and 1964-65 are noted below :—

1963-64	manure	18,60,000 Ton.
1964-65	manure	18,60,000 Ton.

6.1. Municipalities are being encouraged by advancing loan for preparing of Town Compost. Last year green manure seeds were multiplied through-out the district and 678 Metric Ton Dhyincha seeds were procured and distributed and this year also 2320 metric Ton of Dhyincha seeds have since been distributed, extra supply being procured from out-side the district. Besides, 57,763 metric ton of Rural Compost (Sludge) were in use in the last year in the district.

## 7. Seed Multiplication and Distribution :

With a view to deriving full benefits from irrigation and balanced use of organic and chemical fertiliser, a good deal of stress is being laid on saturating the entire tract with improved seeds. In order to make adequate quantity of improved seeds locally at the right time, eight thana seed multiplication farms have since been established during 2nd and 3rd Plan Period.

7.1. Further farms will still be required to meet the full demand and those are being established gradually. Seeds produced at local Thana Seed Farms are being issued to the registered "A-Type of Growers" for further multiplication and after that type of multiplication, these are issued to the cultivators with a view to saturating the area with improved seeds within the stipulated period. Construction of the adequate storages owned by the Government is also under way.

7.2. 5,301 quintals of improved seeds (paddy) have since been multiplied in the years as detailed below :—

1962-63 :	2,685 Quintals.
1963-64 :	2,616    ,,

and 16,203 quintals of paddy seeds have so far been procured from "A-type Growers" during the years 1962-63 to upto-date as detailed below :—

1962-63 :	5,870 Quintals.
1963-64 :	8,561    ,,
1964-65 :	1,772    ,,

## 8. Improved Agricultural Implements :

Providing the farmers with improved implements which will do their job with less exertion and time, is now an important part of the drive to make Indian Agriculture more scientific. Cultivators are progressively appreciating the utility of the improved implements which is reducing unnecessary exertion and toil as



also cost of cultivation. Increased distribution of such implements from the statement below will indicate the popularity it is gaining among the cultivators.

Name of Implements.	1961-62	1962-63	1963-64
1) Paddy Weeder :	54 Nos.	331 Nos.	150 Nos.
2) M. B. Plough :	180 „	264 „	1051 „
3) Wheel Hoe :	114 „	58 „	80 „
4) Seed Drill :	24 „	15 „	24 „

#### 9. Plant Protection :

Precise damage to the crops from insects, rodent and other animal pests and on account of diseases, weeds and parasitic plants, is difficult to assess. But these can be prevented, if Plant Protection measures are adopted on an adequate scale as an integral part of agricultural Plan. With a view to secure maximum effect, manual and power operated sprayers and dusters have been supplied extensively to the farmers. Essential supply of suitable pesticides has also been made at subsidised rate to the farmer. Dusters and sprayers are also supplied at 50% subsidy to the cultivators, details of which are noted below :

Names of Plant protection Implements	Quantity in Nos.			Names of the Plant Protection Chemicals (Insecticides)	Quantity in Qtls.		
	61-62	62-63	63-64		61-62	62-63	63-64
1) Hand Duster :	230	324	286	1) Cop. Sulphate :	1298	1582	3133
2) Hand Sprayers :	105	165	180	2) B. H. C. (10%) :	28493	53440	16550
3) Power Duster :	15	16	22	3) D. T. T. (50%) :	227	227	21
4) Power Sprayer :	20	5	12	4) D. T. T. (5%) :	45	46	73

#### 10. Improved Agricultural Practices

525 Nos. of Demonstration Centres have been run to demonstrate improved methods of cultivation to the cultivators. One thousand and odd trials with fertilisers have also been conducted to advocate the efficacy of fertilisers in increasing yields. Improved methods of paddy cultivation carried out covering an area of 63543 acres in the year 1963-64. Different factors of production such as timely intercultural operation, employment of improved implements, judicious utilisation of water, timely pest control measures, application of balanced fertilisers etc. were employed to secure higher yields per acre. Target for the year 1964-65 on the scheme has been fixed at 1,42,580 acres in the district.

#### 11. Intensive Rice Cultivation Programme :

Another most important feature of the Third Plan is the starting of intensive agricultural district programme under which 12 (twelve) blocks in Midnapore (West) 14 (fourteen) blocks in Midnapore (East) districts have since been selected for intensifying agricultural activities. One of the important criteria of these blocks is the availability of assured water by irrigation and rainfall. This ensures favourable conditions for making a marked advance in production. Essence of the programme is to develop farms and village production plans on the basis of which full supplies and credit will be made available to the cultivators. An effort will also be made to reach to all the cultivators their needs through co-operatives and Panchayets and to formulate production plans which will progressively involve all agricultural commodities.

11.1. In the above lines, we have tried to portray, as far as practicable, the picture of the district in respect of Agricultural Development during different plan periods, particularly in the Third. It is not too much to expect that on completion of plans, our long cherished goal to make all out improvement in the agricultural sector and thereby ameliorating the economic condition of the tillers of the soil and the country as a whole, will not be difficult to achieve. Of course impediments in the way of attaining success should also be taken into consideration. The cultivators are the most orthodox class in the society. They hesitate to accept any new idea. They prefer to cling to the old system rather to new revolutionary ideas. So we have to advance very cautiously in this regard. Our progress has not, perhaps, been monumental, but we can say, we are marching towards our aim with confident steps.

## CHAPTER—V

### Agricultural Marketing

1. The object of the present Chapter is to give an idea about the system of marketing of agricultural produces, marketing practices prevalent and the different aspects of the problem of agricultural marketing in the district of Midnapore. But before we take up this subject we propose to give an idea about what agricultural marketing actually means, as we think general readers would find it easier to understand the problems of marketing in the district if these are studied on the background of this theoretical discussion.

2. Now to begin with let us first define "Marketing". "The study of agricultural marketing comprises all the operations, and the agencies conducting them, involved in the movement of farm produced foods and raw materials and their derivatives such as textiles, from the farms to final consumers, and the effects of such operation on farmers, middlemen and consumers." This is the definition which has been given by an eminent authority on the subject (Prof. F. L. Thomson). Marketing thus does not connote only buying and selling. Marketing comprises the entire channel of distribution of the agricultural crops after its production stage to its consumption. Production is not complete with harvesting. It must reach the consumers, otherwise the utility of production becomes lost. In other words marketing is the process which links the producers with the consumers. So it is important that anyone studying agricultural marketing and how to improve it should know as much as possible about consumers of farm products.

2.1. Marketing discovers consumers but it is also an incentive for producers. The farmers invest capital on his land, seeks credit for financing his cultivation programme for securing better seeds, efficacious fertilisers, best type of implements. But all these are lost unless he gets a price for his produce above his cost of production. Marketing renders him this service. When the farmer's investment gives him adequate return he goes out for further production and he gets more incentive. So in order to secure increased agricultural production, it is not enough merely to provide adequate supplies of production materials and credit to cultivators. There must also be sufficient incentive for production and one of the main incentives is to enable the cultivators to obtain fair price for their produce. In any agricultural production programme, marketing has thus been agreed as a component part. In this connection the observation made by the United Nation Conference of Food and Agriculture, held in October, 1945 at Quebec deserves reference. It states :—"Marketing is the crux of the whole food and agriculture problem. It would be useless to increase the output of food, it would be equally futile to set up the optimum standard of nutrition unless means can be found to move food from producers to the consumers at a price which represents a fair remuneration of the producers and is within the consumers' ability to pay. Similar consideration applies to other agricultural products." It will also not be out of place to quote from the Report of the Technical Meeting on Marketing (Asia and Far Eastern Region) held on 27th April to 6th May, 1959 at New Delhi. It observed, "It was recognised first that agricultural production is seasonal and has to be held and distributed for regular consumption over time. Secondly, the production of different crops tends to be localised and the main centres of urban and industrial consumption are separated by considerable distance from areas of production. Thirdly, owing to natural or acquired condition, different areas may specialise in different agricultural products. Thus, consumption which is the final purpose of production involves much movement

of conditions over time and space entailing changes of ownership at one or several stages during assembling, processing, and distribution". The meeting decided to consider marketing as including all related processes and services performed in the movement of commodities from primary producers to ultimate consumers.

2.2. In the report of the said meeting it was also observed that "lack of incentive to larger production and many other factors discouraging efforts to production can be attributed to a considerable degree, to poor marketing facilities. The general poverty of the small farmers and their chronic indebtedness to money lenders, weakens in the farmer's bargaining powers, especially during times of harvest. This weakness is aggravated by the farmer's lack of knowledge of prevailing prices and marketing procedure."

I am sure all will agree with the observation made above. This is the problem to which all attention must be given as because, "it is not strange to note that the farmer has little incentive to increase his production and adopt better methods of cultivation, for he cannot see increased efforts bringing him a commensurate increase in returns."

2.3. Now what this marketing system is called upon to do? From the definition we have given above and from the observation as made above it must have been clear that marketing system is constituted of certain functions and services. These functions and services are listed broadly as follows :—

- (1) Assembling.
- (2) Processing or preparation for the market,
- (3) Dispersion or distribution.

Farmers' produce, before this can reach the consumers, must be concentrated at any point in quite good quantity to enable processing or packaging or 'assembling'. This function or service has led to the creation of what we call markets. Assembling is necessary as otherwise it is not economical to handle, it is an important part of marketing. Tomato grown in the remote part of Ghatal subdivision must be assembled at Calcutta market before these can be distributed to consumers in Calcutta, where the demand for this particular crop is located. But very few crops are ready for final consumption when they leave the farmer. Paddy is harvested, but elemental utility is created only when it is processed into rice. The marketing system should thus convert the produce into such form, or in other words elemental utility must be created, before they can be distributed to consumers. Processing is therefore an essential function of marketing. In the words of Prof. Thomson "After the products of many farmers in scattered localities have been concentrated, processed and made ready for shipment a process exactly opposite to that of assembling begins". This is distribution which serves in reaching the produce to the millions of consumers.

2.4. Besides there are other services also termed as secondary services, which marketing system has to perform. These are (1) storing (2) grading and standardisation (3) packing (4) transporting (5) demand creation and price recovery. They are called secondary services because they are rendered in all three of the major sectors of the marketing system :—assembling markets, central and processing markets and markets for dispersion or distribution. Storing is an important function at all stages of marketing. When the crops come out of the field it must be stored either at the farm or at the assembling point, or at the processing point or at the distributing point to enable the produce secure a better price as also to stabilise market demand. Warehousing and storage facilities are accordingly necessary in any improvement programme of agricultural marketing. Grading and standardisation, quality control and inspection constitute another very important service rendered by the marketing system. Packing also contributes



Rice in retail market



Agricultural commodities on sale in a bazar in Jhargram



to more efficient marketing by reducing bulk shrinkage and spoilage as also by reducing cost. Lastly, though not the least, efficient market information services is a pre-requisite for an efficient system of marketing which not only helps the farmer to get better price for his produce by disposing his stock at an opportune moment in an appropriate market, but also helps determine his cropping pattern. It is therefore, necessary that in any improvement programme of agricultural marketing market information service must be given due importance.

2.5. It thus comes to that "any plan of economic development that accrues at eliminating poverty of the agricultural population, reducing consumer prices, earning more Foreign Exchange eliminating un-economic wastes, has to pay special attention to the development of efficient agricultural marketing" (Report of the Technical Meeting on Marketing -Asia and Far East Region).

### A. System of Marketing

3. We have said above that marketing discovers consumers. In fact marketing is the whole process which a commodity is to undergo commencing from the storage immediately after harvest till it reaches to a consumer. The marketing practices, therefore, may vary from place to place, time to time, and commodity to commodity. The system of marketing is however, fundamentally common. The traditional system of marketing in which the producers assemble their produces in a central place, commonly known as market, where the consumers gather with slight variation here and there, are still in existence in this district also. The system of barter is also not absent in the remote villages, where the major crop serves as a medium of exchange. Loans are often given in terms of paddy to be returned in kind with interest. First, vegetables etc. even now are exchanged for paddy or rice. But with gradual development in the sphere of economic activities the modern system of marketing has also developed and complexities and problems of marketing have also gradually cropped up. The grower's price is in most cases determined and dictated by the middlemen, who operate in the villages. These middlemen work as agent of the wholesalers or millers and are also financed by them. This system of marketing however, varies from commodities to commodities. This aspect is discussed briefly in the following paragraphs :

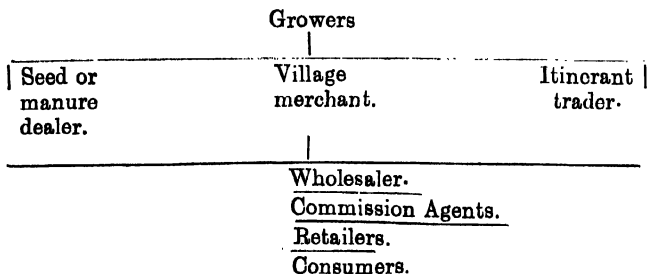
3.1. Paddy, the most important agricultural produce of the district, is both a food and a cash crop here and has earned commercial importance. There are various systems under which the marketing of paddy is done. More often than not the producers make direct transactions with the consuming local rice mills at the Mill gates. The middlemen who mainly operate in the marketing of paddy, are known as "Beparies" and "J'arias" who sometimes may make direct purchase from the growers at the farms and carry the same to the Mills for sale. Such operations are done both on commission basis at 0'12 n.p. per maund and on cash sale on a margin of profit varying from 0'50 n.p. to Re. 1'00. per maund. There are also aratders or stockists who make purchase from all sources like growers, farias and beparies, hold it for sometime and make a bargain even upto Re. 1'00 by disposal at opportune moment. Millers after procurement of paddy through all these agencies, perform the processing operations and then arrange disposal of rice to the local markets etc. through retailers. But milled rice are mostly exported outside the district, particularly to Calcutta area. The stockists or wholesalers who maintain their own godown or on hire, arrange for marketing finance as well. The Mills also store rice in their own godown when needed.

3.2. The marketing system of Jute—the highest foreign exchange earner amongst agricultural produces of the State, is almost similar to that of paddy. The same chain of middlemen like bepari, faria, aratders and balers operate in the trade.

The transactions between the growers and the millers are very rare. The producers seldom bring the commodity in largescale to the market for disposal. Almost all the entire produce is usually disposed of by the producers at their farm doors, to the village Farias or representatives of merchant money-lenders who approach them for collection under previously admitted terms at latter's advantage. The farias are also individually connected with the merchants (wholesalers or balers) who advance money to these farias or representatives for making purchase in the mofussil area both outright and with advance payment—on "Dadan" system. The merchants in turn dispose of the same to the outside customers at the terminal markets of Calcutta (Cossipur). The farias or representatives of traders also visit the primary markets on hat days during the season and sometimes make direct purchase. The Balers arrange for assortment and grading according to popular trade grade specification, storage as also for baling and transport etc. Amongst the various market functionaries the big merchants or balers who make direct contact with the consuming mills predominate in the trade and are mainly responsible for supply of marketing finance. Here is the key point where wholesalers occupy the unique position and control the whole trade. They engage purchasing agencies at primary markets and procure jute directly from growers or through the village middlemen like farias, beparies etc. The commodity thus procured is transported to Kolaghat—the biggest secondary market cum-baling centre in the district. Transaction of several *lac* maunds of jute to the extent of 80% of the whole trade of the district are done in one season—for further movement to the mills situated in greater Calcutta area. The rest goes to Cossipur, Hatkhola and Shyambazar (terminal markets) direct along with produce of other districts, where aratders play a very important role to act as "Liaison" for final consumption mostly by the Calcutta Jute Mills for export to the foreign countries after final baling.

3.3. Potato is another commercial crop second in importance only to jute or paddy in the district. After harvest the village merchants or itinerant traders collect potatoes direct from the field to the extent of 30% from the house of the cultivators before they are supplied to wholesale dealers. The wholesalers also collect potatoes from villages direct through their agents. Fifty percent of the harvest is carried invariably by the cultivators to the nearest primary markets and to the seed and manure merchants from whom the growers often take seeds and manures on loan. The wholesale dealers undertake the responsibility of assortment, packaging, storage, transport and for the supply of marketing finance. The commission agents liaison with the wholesalers as growers' representatives and with the retailers functioning like a broker in the grain market.

The diagram below shows the main channels as to how it reaches to the consumers.



3.4. The distribution of agricultural commodities like pulse is undertaken by the following agencies, similar to that of other grains.

- (a) Growers ;
- (b) Village merchants ;
- (c) Wholesale merchants.





Transaction of Jute



Betel-leaves on sale



A Cashew-nut plant in bloom



Assembling of sweet pumpkins and potato in a  
primary market

The producers bring their commodity to the nearest primary market or to the wholesale merchants at the nearest Ganj (Assembling centre) for direct disposal and as also very often dispose of the same locally to village merchants or beparies operating in the areas of production, who later on dispose of the same at some neighbouring primary markets to wholesalers. Wholesale merchants play important part in the distribution of pulses. They are of two classes namely, those who buy and sell in the same market and those who buy in one market and sell in another. Dealers of the first type operate in small scale and the later in large scale who undertake responsibility of storage, transport and supply marketing finance.

3.5. In Betel-leaf trade, the "Aratders" have predominance in wholesale transaction. The producers supply to aratders direct who link themselves with the various agencies of the markets in and out-side the district acting on commission basis. They also make supplies to local retailers on agreed terms in the open competitive market. Direct transactions between the producers and local retailers are also in practice. The producers also make partial retail transactions in the local consuming markets.

3.6. The system of marketing of cashew-nut, which is another important agricultural produce earning considerable foreign exchange from both Doller and Sterling areas, is that a few middlemen of the locality known as "Bepari" make direct purchase from the producers and arrange supply to the traders at Calcutta or direct to the terminal markets of Madras, Bombay and Kerala for export after decorticating in the processing firms there. Excepting only a very small portion meant for local consumption the entire production is exported as whole-nut from the State, as there is no processing firm in West Bengal. The other market functionaries like commission agents or brokers are conspicuously absent in this trade at the locality, nor does "Dadan" system prevail here unlike in Southern India. This helps in reducing marketing costs.

3.7. Cultivation of ground-nut is mostly confined on either banks of The Subarna-rekha river, in the villages of Gopiballavpore and Nayagram P. S. After harvest, the cultivators dispose of 64% of their produce from their doors through village merchants who in their turn carry the same to the nearest secondary market in Manikpara of Jhargram Sub-Division, situated at a distance of 20 miles from the producing area. The growers hardly dry it, which however is done by the wholesale merchants in the Secondary market at Manikpara, who on their turn mostly export the same to Calcutta or Southern area by Rail. A portion of the trade is also carried by the traders of Dantan where from it is exported only to Southern India.

3.8. The condition of the bovine population being far below normal, the production of milk falls far short of the normal demand of this most important nutritive human food, excepting in some concentrated pockets like Garbeta where buffaloes thrive due to some natural advantages and Ghatal where the alluvial soil provides required fodder creating cow's milk producing zone. In neither place raw milk is sold for direct consumption purposes but it is utilised in the manufacture of butter and chhana. The present system of marketing is that the Calcutta Ghee Traders provide "Dadan" (Advance money) through their representatives who in their turn supply the same to the owner's of cattle through the selected local butter traders. As a result, the producers of milk get only 40% of the Consumer's price the remaining being swallowed up by the middlemen in the chain. As to the marketing of chhana, almost the similar procedure is adopted in respect of 80% of the produce, the remaining 20% being consumed locally by the sweetmeat dealers who get the supply through their salaried employees or even through petty dealers on commission basis.

3.9. The locally produced gur starts to appear in the primary markets early in December containing in earthen pitchers duly covered, of capacity 10-15

seers each. As in case of potato the farias and paikers play the main role amongst middlemen who acting, mostly on their own capital make direct purchase from growers' door and supply to the wholesalers in important markets like Amlagora, Chandrakona road etc. The wholesalers in their turn hoard it for sometime and then distribute it through the retailers at a margin of profit- 0'25 n. P. per maund in case of wholesalers and Re. 1/- in case of retailers.

3.10. After threshing, the straw is made ready for market staged in heaps. The village merchants, the itinerary merchants, and the farias or commission agents acting on behalf of the wholesalers (Exporter) on commission basis visit the villages, make outright purchase and arrange for transport from village to nearest Rail head or other exporting centres where "Aratders" also play an important role. The commission agents or the aratders get commission at the terms fixed by the wholesalers (Exporter) who get it transported to the most important consuming market at Calcutta viz., Hatkhola.

4. In the present day system of marketing as enumerated above, middlemen play a very important role and their services are indispensable. It is sometimes said that problem of agricultural marketing can be solved by the elimination of the middlemen. This statement is however not wholly true. In the present day of economic specialisation when producers and consumers live far apart, it is hardly possible to bring them together unless there are agencies to go between. It is of course true that too much of middlemen operating in our country has aggravated the marketing problem. It has increased the cost of marketing as a result of which the consumers have been made to pay more than the value of the goods they get. On the other hand the growers are getting only a very small share of the consumers' rupee. It is therefore necessary that to curtail the marketing cost and to give the grower a fair share of the consumer's money, there should be very limited number of middle-men. So it is limitation and not total elimination of the middlemen that should be the objective of marketing development. In this context it would be quite relevant if we quote Dr. S. A. Hossain who is of the view that—"So long as the individual cultivator is ignorant of market intelligence and practice his produce or marketable surplus remaining small in volume and low in value, and his economic condition and the rural communications being unsatisfactory, the number of middlemen cannot be considered as unduly large". (Agricultural Marketing in Northern India—Dr. S. A. Hossain)

4.1 In the system of marketing, as we have enumerated above, existing in the district of Midnapore there are various types of middlemen in operation. These middlemen operate both in primary markets and secondary markets, they operate also in respect of all commodities produced in the district. We may have some idea about the activities of these middlemen from the following paragraphs :

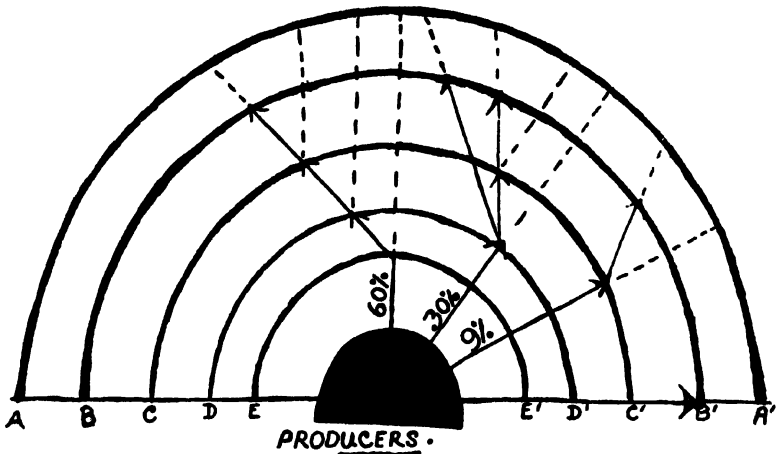
- (a) **Farias** : These people, also known as "Dalal" make direct contact with the growers either at their doors or at the markets for performing primary transaction. Then they bring the produce thus pooled to the "Beparies" or "Aratders" at the secondary market for disposal. Usually they work on commission basis and sometimes on cash sale system keeping a margin of profit. They are financed by "Beparies", wholesale merchants or "Aratders" for making purchase on behalf of the lenders. They do not undertake any assortment or grading.
- (b) **Beparies** : These people also known as petty merchants, mostly get supply from "Farias". Sometimes they also make direct purchase from the growers at the primary markets and do not usually approach the growers at their farm doors.

They have link with the merchants or aratders at the secondary markets or consuming centres. They are financially better-off comparatively, and can afford to invest their own capital though meagre in addition to the loan they may have received from the merchants.

- (c) **Aratders :** These classes of people when operate in the assembling markets have the same function as beparies, the difference being that their volume of business is comparatively higher and that they sometime make direct contact with the Mills when operating in the terminal markets. In latter case they undertake the responsibility of storage on agreed terms which vary from commodity to commodity.
- (d) **Wholesalers :** The wholesalers purchase in large scale in the producing areas either direct from growers or from other middlemen while the commodities are enroute to the markets or even from the markets (primary) after their arrivals. They also purchase through farias, beparies, commission agents or from any other wholesale merchants in the central markets. The wholesalers practically control the whole trade as they specialise in the commodity and sell them direct to the Mills or make ready for consumption, through the retailers. A wholesaler makes purchase and sales, makes suggestions to the manufacturer, forecasts, stimulates and interprets the design of the customers and above all helps in keeping prices steady.
- (e) **Commission Agents :** They act as representatives of growers, and often undertake assorting and/or grading of commodities according to the demand or popular trade specification. The services of the commission-agents consist in storing, handling of the produce consigned to them by the producers or the trader.
- (f) **Retailers :** Their function is not only to store but to supply the commodity according to the popular demand of the ultimate consumers.
- (g) **Co-operative Marketing Societies :—**Co-operative Marketing Societies also operate in the markets. These societies sometime make outright purchase both from member growers and non-members under different terms in the season and store the same for outright disposal in the near markets. Sometimes these societies work on commission basis as well. The main function of the society is, however, to make available finance to the members on pledge of goods after harvest to check against distress sale and by thus ameliorating their economic position consisting mostly of growers.

4.2. The system of marketing prevalent in the district as described above clearly gives the idea that a commodity after it comes out of the farm passes through different stages before it reaches the consumer. We have also seen that the system varies from commodity to commodity to a certain extent. But in general the whole position may be summed in the following diagram reproduced from "Agricultural Marketing in Northern India" by Dr. S. A. Hossain. This may not be totally applicable to Midnapore District, but the situation is more or less the same.

**The proportion of agricultural produce  
marketed at different stages.**



AA' represents consumers. CC' represents town markets.  
 BB' represents Wholesale DD' represents Peripatetic Dealers.  
 markets.  
 EE' represents Village merchants.

The thick line represents direct connection between different marketing points (indicated by arrow heads). The dotted line represents direct connection between marketing points and the consumers.

### B. Marketing practices and market charges

5. Usually the major agricultural crops, particularly grains, are brought to the assembling markets packed in gunny bags containing 2 maunds or 75 kg. each and in bundles of one maund in respect of jute. These are kept in the carts parked in front of "Aratders" or wholesale-dealers' shop. The transaction between the buyer and the seller takes place normally in the morning and deliveries are made in the forenoon, in between the time is taken in weighing and settling accounts on the same day. The commodity offered for sale is heaped in front of the "Arat" or in the specified place of the market. Direct negotiation on open sale are being resorted to and the system of "Dalal" or "Hatta" is conspicuously absent. Unauthorised deductions on several pretext like "Dhalta" "Iswarbitti" etc. are prevalent in wholesale transaction in the secondary market—the rate of which vary from commodity to commodity. Prices are fixed by means of open and private negotiation as the case may be, after physical verification of the commodity with the sample. The labourers engaged by Aratia or the wholesaler, aid in driving away refractions etc. cost of which is borne by him but deducted from growers' or sellers' account at the time of payment.

5.1. In the case of betel-leaf immediately after plucking is done, these are collected together in a basket and washed. Then these are arranged "Pon-wari" i. e. 80 nos. in a row—5000 (five-thousand) betel-leaves are arranged in a bundle. These are then brought to market by lorry/cart or head-load. The producers generally conduct the transport by head-load and the middlemen by lorry/cart for sale to the wholesalers direct by means of open negotiation on the basis of the bundle as arranged above.

5.2. Cashew-nuts are brought to the assembling markets packed in gunny bags and kept in the cart in front of wholesalers' Arat. The wholesalers, as in case of grains, make physical verification of the quality and quote the prices and then bargaining takes place openly, after which prices are fixed and weighment is done and payment arranged on the spot on the very date.

5.3. After the harvest of the crop cashew-nut is dried in the open field and then the processing for separation of kernels from the shells is undertaken mostly by the indigeneous method of splitting up the whole nut into two. The split kernels thus obtained is packed in tin weighing 10 to 15 seers for disposal in Calcutta market or in the local market. The shells thus left after separation of kernels are sometimes put into heat for extraction of oil, but major portion is wasted as there is no oil extraction factory here. The major portion of the consignments of the whole nuts is however, exported to Calcutta or other markets of Southern India. The market functionaries like Commission Agents, Brokers etc. do not prevail.

5.4. After harvest potato is assembled in bulk by the growers carts, bullocks, headload and also by boat to the nearest assembling markets like Amlagora, Banka, Palaschapri, Dudkumara and Ghatal proper. The growers do not undertake any grading or assortment nor do they package it in any container—the function of which is exclusively vested with the middlemen. The merchants on their turn not only make it ready for the market as per popular demand of the wholesaler or consumers but also store and preserve it for seed purpose separately to even Cold Storage situated at a distant market place.

5.5. There is no particular market place like food grains or fibres specially for paddy-straw. The Village merchants or the itinerary merchants contact the wholesalers or exporters and transact business mostly on commission basis when on receipt of the intimation on an agreed term they carry the straw to the Railheads or like exporting centre particularly in the morning during the period of December to June.

6. There are some charges leviable on the sale proceeds of produce or any article put in the market for sale ; in some cases these charges are partially payable by the buyers as well in addition to the price of the produce. The deductions may be both in cash or kind from the sale proceeds. These charges are known as Market Charges. These are legitimate charges realisable by the purchasers and recognised by the custom. The rate varies from place to place and is different from commodity to commodity. This custom of paying market charges exists in Midnapore District also.

6.1. There are some amount of complexities in the matter of distribution of paddy in the assembling markets. The produce is carried to the assembling centre near a Mill by the growers. After preliminary inspection the wholesalers and the millers as the case may be, offer their prices and open negotiation takes place. Usually voices of wholesalers and millers prevail because of their knowledge of marketing condition and price. There after price is fixed, delivery is made by producers or village merchants. At the time of weighment, weight allowances (Dhalta) are charged by buyer from seller @  $2\frac{1}{2}$  seers per maund in respect of paddy and 2 seers in respect of pulse on the plea of refractions and at the time of making payment unauthorised deductions are made in the name of charitable purposes (Iswarbritti) @ 0'06 n.P. per cart-load of paddy and pulses or for 8 to 10 mds. of commodity. Excepting these two no other charges are being levied. Toll or Tax is levied on the produces like paddy, pulses etc. when it enters the area of the market for disposal @ 0'25 n.P. per cart. All these charges are to be paid by growers (Sellers) to buyer. Besides these, the following charges prevail in case of betel-leaf (payable by the sellers per bundle of 10,000 leaves).

Hospital charge	:	0'45 n.P.
Katai	:	0'44 n.P.
Paltai	:	0'25 n.P.
Brokers' commission	:	0'62 n.P.

Total : Rs. 1'42 n.P.

The buyer does not require to pay anything excepting the rent of "Pan-Posta" which will be about 0'03 n.P. per bundle of 10,000 nos. of leaves.

In jute market also the following charges are payable by the seller per md. of jute sold,

Dhalta	@ 2 seers of jute.
Rent of hat	0'12 n.p. per md.
Iswarbritti	0'12 n.p. per md.

The buyer is required to pay only the commission to the Farias or Beparies which is about 0'03 n.P. per md. in case of Farias and 0'31 n.P. in case of Beparies.

7. The prevalence of the custom of charging certain market charges have led to certain malpractices which deprive the growers their legitimate share. Unscrupulous merchants take advantage of the ignorance of the growers and deduct exorbitant charges from the sale proceeds. Unless these charges are regulated or regularised orderly marketing cannot be assured. Recently control measures through regulation of markets by enactment of legislation have been adopted in many of the States and in West Bengal also market regulation is going to be introduced in the near future. These evils are present in the marketing system of this district also. There are certain unauthorised charges leviable on the sale proceeds. Such deduction may be made both in cash or kind. These include the following :

- (i) Unauthorised deductions for contribution towards charitable purposes.
- (ii) Deductions are also made to make up the loss in favour of the buyer in weight on account of impurities, driage etc. These deductions known as Dhalta are made even though the condition of the produce is not such as may be subjected to deductions.
- (iii) The sellers are to bear the charges required for weighing or measuring of produce.
- (iv) Taking away of samples in sizeable quantity.
- (v) Other unauthorised deductions like Kayali, Dalali, Tola etc. are also prevalent.

### C. Village retention and marketable surplus.

8. The producers in the villages have to meet certain commitments. They have to pay wages in kind for hired labour and there is the practice of barter transaction. Besides the growers have to set aside a portion as seed and also for the purpose of stock-feeding, giving alms and charities. Above all they must have adequate stock for consumption by themselves and their dependents. All these together constitute the village retention, which is a variable factor in the village economy. It varies from place to place depending as they are on the factors noted above. Often factors like size of growers' holdings, their indebtedness, relative importance of rice in the local dietary etc, also are to be considered in determining the proportion of the village retention so far as food crops are concerned. In case of non-food crops only the quantity necessary



for domestic consumption goes towards making the village retention, the balance being the marketable surplus.

9. Marketable surplus is a very important factor in determining the general trend of the local economy since on the flow of such surplus depends the trend of price. It again varies with the variation in prices.

10. The following table brings out a rough estimate of quantitative utilization percentage of the principal crops of the district. This is based on investigation recently made (1962), by the Officers of the Marketing Branch of the Directorate of Agriculture, West Bengal.

TABLE - V  
Quantitative Utilisation  
Percentage of the principal crops.

On accounts of	Paddy	Pulses	Jute	Potato	Betel leaf	Cashew nut	Ground nut	Paddy straw
(i) Domestic consumption.	55%	10%	3%	16%	1%	1%	40%	10%
(ii) Seed.	6%	5%	0.5%	4%	—	—	—	—
(iii) Other domestic requirements.	20%	5%	1.5%	15%	—	—	20%	2%
(iv) Marketable surplus.	19%	80%	95%	65%	99%	99%	40%	88%

10.1. From the table above it will appear that 81% of the total production of paddy is utilised within the village, 55% for family consumption and 26% for other use leaving only 19% as marketable surplus. The practice of paying wages to hired labour in kind, the prevalence of barter system i.e. exchange of commodity for commodity, the common practice of stock-feeding etc. are still in vogue in Midnapore district. In case of jute however the village retention is insignificant. The marketable surplus of a produce is therefore, dependent on various factors though the general trend is generally influenced by the price of the commodity.

10.2. To compare, the position in regard to the State as a whole so far as only foodgrain is concerned may be indicated as below (Reproduced from the Brochure on the Marketing of Rice in West Bengal, published by the Marketing Branch of the Agriculture Directorate)

(i) Seed	...	4%
(ii) Payment for wages	...	20%
(iii) Barter	...	2%
(iv) Domestic Consumption	...	47%
(v) Marketable surplus	...	27%

So it is found that while the marketable surplus of foodgrains for the State as a whole is 27% that of the district of Midnapore is only 19%.

#### D. Price spread.

11. Price spread indicates the distribution of the consumer's rupee and its share apportioned at different stages from the producers to the consumers. This is constituted of varied items of expenditure incurred in various processes through which a commodity passes to a consumer. The expenses and their items increase if however the intermediate functions are large e.g. long distance

transport by rail or river, assembling by wholesale merchants, transport again to distributing markets, final distribution at destination through retailer. It is therefore obvious that the price spread and the ultimate price depends on how the product is distributed and how many stages it has to cover from producers to consumers. Study of price-spread helps to find out the economics of marketing. The more the share of the consumer's money is apportioned by the grower the more economical the marketing system can be stated to be.

11.1. A complete price spread of few major commodities of the district may be found in Appendix—VIII

### E. Storage.

12. Storage plays a very important role in marketing of agricultural produces. The object of storage has been till recently also, to guard against famine, war or other kinds of natural calamities. To set aside something, to save few quids out of what one earns for the rainy days, is an instinctive action in the animal world. But with the gradual development of human society and with the gradual increase in the complexities of the economic behaviour of the human being a new economic concept has been attributed to storage and it has gained a new economic value and significance. "Storage is no more merely a weapon to stave off natural or human disasters, but an essential promotion of economic welfare. It therefore smacks neither of pessimism nor of war mongering". The concept of warehousing and storage is now based on sound economic consideration. This consideration is the necessity to stabilise the fluctuating tendencies of prices as well as that of agricultural production. So the importance of storage and warehousing arises from the "periodic and fluctuating production on the one hand and relatively speaking, continuous consumption of most agricultural products on the other". Due to such seasonal and periodic fluctuation in production the question of conservation comes to the forefront.

12.1. Ours is one of the oldest countries in the world where agriculture had reached a stage of maturity many centuries ago. But it developed under such conditions and environments that the industry has become very complex with innumerable problems like agricultural indebtedness, uneconomic and fragmented holdings, excessive pressure of population on land, agrarian discontent, low yield rate. Besides crop and production pattern in our country are conditioned mainly by the season, rainfall and other natural factors. Production is not commensurate with the minimum requirement of the population. The methods of cultivation are primitive and there has not been any significant advance in the application of technology in agriculture.

12.2. These characteristic features in agricultural production have given rise to another fundamental characteristic and that is the variability of its nature. Production of different crops varies from year to year and in cases annual fluctuations are violent. This fact may be evident from rice production, the major crops in this State as well as in India, which varied from year to year. It varied between 33'37 lakh and 39'50 lakh tons between 1947-48 and 1952-53 ; in 1953-54 it however shot up to 41'46 lakh tons during 1955-56 and it was estimated at 41'72 lakh tons during 1959-60. The production of Jute, which is another important crop produced in this state, during the same period has been that it varied between 648'7 thousand bales and 2,363'1 thousand bales between 1947-48 and 1952-53. In the year 1953-54 production came down to 1,498'4 thousand bales while 1956-57 production still dropped down and it was only 1,344'7 thousand bales. Taking India as a whole the picture had not been other wise. It was only during 1951-52 to 1954-55 that there was a regular rise in production of most crops except sugarcane and oilseeds. For example, the annual production of rice taking India as a whole varied from 24'5 to 27'8 million tons

jowar from 6'9 to 9'1. million tons, bazra from 3'4. to 4'5 million tons, sugarcane from 4'4. to 5'7 million tons and jute from 2'9 to 4'2 million tons during the three years ending 1955-56.

12.3. The characteristic variability in the nature of agricultural production stimulates another very important characteristic feature in the field of production and that is price variation. It is a well known fact that prices of agricultural products display fluctuations more violent and frequent than those of most other products. This fluctuation in price is seasonal and variation in prices is periodic and tendency of price is to show wide fluctuation. This is because the growers have the tendency to sell out their stock immediately after harvest due to pressing demand to meet their immediate needs. Naturally there is glut and price comes down when again heavy purchase—pressure deplets the stock the price again tends to go up and in this way the cycle goes on revolving. There are of course certain factors responsible for this state of affairs and these may be stated in brief as small scale production, prolonged process of agricultural production, poverty, inadequate storage facilities and need for cash to meet the pressing demands of the creditors and the landlord of the growers, purchase of seeds, fertilisers and consumption goods. The behaviour of prices during the pre-harvest period is however, rather unpredictable, influenced as it is by the prospects of the coming harvest.

12.4. The percentage variation in prices has shown a marked improvement during the post war period in relation to the existing during the year 1931-39. Percentage variation in the price of rice during 1931-39 was 11'5 to 44'4 p.c. while during the period 1953-57 it was estimated as 7'5. to 33'0 p.c. This improvement shows that the producers have gained in staying power and there has been comparatively even flow of goods in the market. The Foodgrains Enquiry Committee in its Report (1957) stated "Data available from most sources show that stock-holding at the farm level has increased considerably in 1956-57 as compared to 1955-56. Less than 60% and in some areas even less than 50% of the crop came to the market in 1956-57 within 2 or 3 months of the harvest as compared to 70 to 80 p.c. in normal years. Sales in the middle, and to some extent even in the end of the season became relatively more important". This is really an important as even flow reduces normal seasonal price fluctuation. But these conditions have developed as a consequence of higher level of prices. This staying propensity naturally call for adequate storing, an efficiency in which thus works as price—incentive. Over and above efficiency of storage minimises loss. In our country protection against heat or moisture is rare and damages done by weevil or pest are considerable, though no comprehensive estimate for such losses is available. Food Grains Enquiry Committee in its report (1957) has stated that "the total annual loss in the country due to improper storage during the quinquennium ending 1956-57 may be estimated at about 2 million tons". The losses in case of perishable crops are more heavy. According to a recent study made by the Agricultural Marketing Adviser, Government of India in 1955 "nearly 15 to 20% of the 10 million tons of the average annual production of fruits and vegetables or 1½ to 2 million tons go waste in the producing areas for want of transport facilities to market centres and for lack of storage facilities therein." So improvement and reorganisation of storage facilities are urgently required in our country with food shortage". The gain of higher prices to producers and of stability of prices and supply to consumers would be an additional advantage. Warehousing scheme has thus tremendous potentialities in our country.

12.5. But besides this there is another problem with which agriculture in our country is faced with. The proverbial indebtedness of the growers is a baffling problem which creates a vicious circle. The producer needs capital, he needs seeds and manures, he has to pay rent but he has no resource. He goes

to the money-lenders for his capital. He has to repay it and his produce is appropriated and the circle takes its course again. This aspect has made agriculture more complex. The problem is, the producer needs credit. "Credit" says an old French Proverb "supports the farmer as the hangman's rope supports the hanged". The All India Rural Credit Survey Committee which was appointed by the Reserve Bank of India to make an extensive study of the problem for finding out remedy has described this particular problem as "Agricultural Credit is a problem when it cannot be obtained ; it is also a problem when it can be had but in such a form that on the whole it does more harm than good". The Committee found out that "private credit agencies taken together (excluding commercial banks, but including professional money-lenders, agriculturist money-lenders, relatives, traders and landlords), supplied about 98% of the total amount borrowed by cultivators. The combined contribution of Government and the Co-operatives was about 6% of the total (each accounting for about 3%). As for Commercial Banks 1 p.c. represented the insignificant part played by them in the direct financing of the cultivator." The Committee thus based its recommendations in suggesting ways and means for the increase in the percentage of institutional credit where lies the panacea for agricultural development. Setting up of warehouses is one such measure suggested by the committee.

13. The existing methods and conditions of storage in the district are however primitive. In the villages the system is most unsatisfactory. Paddy is normally stored in the cultivator's hut in "morais" or golas, made of split bamboos. Paddy is also stored in what is locally known as "Baker" "Karai" or "Buha"- these are made of straw rope prepared according to individual need. The big growers in the villages however preserve paddy in "Gholas" made of bamboos on raised platform and having thatched roof. There are farmers who do not have separate storage space. They pile their produces in heaps on the floors of their dwelling houses, which are mostly kutcha structures. In the wholesale and secondary markets both paddy and rice are stored in godowns with cemented floors or paved with flag-stone. Paddy is stored in bulk. At rice mills paddy is stored both in bulk and in bags and rice is usually stored in bags in the godowns with pucca floors. There is practically no storage accommodation for jute in the primary markets or in the villages. Only at Kolaghat, the biggest assembling centre for jute in the district, the jute balers have storage arrangements. So far pulses are concerned the traders at Manikpara, an assembling centre for pulses in the district, or at Ghatal have got some accommodation for temporary storage ; but the space is too meagre compared to total requirement. Similar is the case with potato either at Amlagora or at Dudkumra or any other marketing centre. There is hardly any arrangement for storage of gur, Cashew-nuts or betel-leaf.

14. The following table shows the approximate storage accommodation available in some of the important markets of the district.

TABLE—W.  
( Storage Accommodation )

Name of market	No. of Godowns :		Total storage Capacity. (Godown upto 50 mds)
	Private	Govt.	
Kharagpur	79	3	2,20,000 mds.
Belda	8	3	63,500 "
Khakurda	6	0	2,600 "

Name of market	No. of Godowns :		Total storage Capacity. (Godown upto 50 mds)
	Private	Govt.	
Kukrahati	10	1	10,400 mds.
Geokhali	34	2	65,000 "
Teropakhia	39	3	83,300 "
Tamluk	52	2	75,100 "
Mahisadal	56	0	25,700 "
Panskura	8	0	32,700 "
Kolaghat	66	2	3,68,200 "
C.K. Road.	8	0	32,700 "
Contai	3	2	15,600 "
Rasulpur	0	2	30,000 "
Kalinagar	3	1	2,400 "
Jhargram	12	1	2,20,000 "
Manikpara	10	0	2,50,000 "
Silda	6	0	20,000 "
Binpur	4	0	2 000 "
Ghatal	102	1	54,000 "
Dudkumra	35	0	21,500 "
Midnapore	30	5	6,00,000 "
Amlagora	20	2	4,00,000 "
Balichak	50	6	10,00,000 "

15. Cost of storage is an important factor in the marketing of foodgrains particularly which require long-period storage. In villages foodgrains are stored in golas and as such it is difficult to make accurate estimate of the cost of conservation in the villages. While in the market the cost of storage depends on three factors e.g., godown rent, handling charges, and interest. These are however, variable factors. The following table will show the normal rate of storage for different commodities as prevailing in the district.

TABLE—X  
(Storage Charge)

Name of commodity	Periodicity of storage	Rate of storage charges :
Paddy	December—May	Re. 1/- per month per 100 rupees worth commodity.
Pulse	February—May	—do—
Jute	Throughout the year.	200/- per month accommodating 1000 mds. capacity.
Potato	April—May	150/- per month accommodating 1000 mds. capacity.
Gur	January—May	@ 0'06 nP. per maund.
Cashewnut	Octo.—December	0'25 nP. per maund.

16. Loss in storage normally results from floor damp, weevil formation vermin attack and rodents. Paddy and whole pulses are less susceptible to damage. Rice suffers losses in weight due to diriage as well as due to floor damp, weevil infestation and rodent attack. Paddy may loose 1 to 3 per cent in weight due to diriage in hot months while rice may loose in weight the extent of  $\frac{1}{2}$  to  $1\frac{1}{2}$  per cent when stored for two to four months (Brochure on the Marketing of Rice in West

Bengal). Food Department however normally allowed 1 per cent as storage loss for storage upto six months. No scientific study has been made to give a correct indication about such loss. A rough estimate has however been made by random study in the district from which the following result has been obtained.

TABLE—Y  
(Loss in Storage)

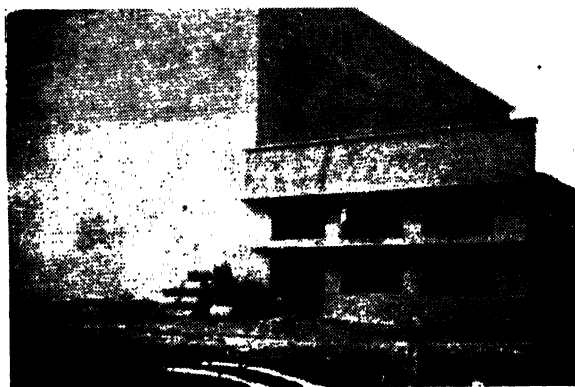
Name of commodity	Loss in Storage :		
	With farmers	On transit	At markets
Paddy	3%	1%	2%
Rice	1%	1%	1%
Jute	3%	1%	2%
Cashew-nut	2%	1%	1%
Ground-nut			

17. "To give point and purpose to production its marketing must be undertaken in an orderly manner. So must storing, which is a very important adjunct of marketing. As marketing becomes more and more orderly, storing becomes more and more a specialised function. Public warehousing is thus a specialised storing, the importance of which is providing scientific storage, in regulating the flow of goods to the market, in the evolution of proper grade standard, in creation of an instrument for obtaining credit and in a number of other subsidiary function". "The object of warehousing has also been described by the West Bengal State Warehousing Corporation in its publication "The Code of Management" as such—"The most important objective of the warehousing scheme is to provide ideal storage facilities to depositors not only for the purpose of enabling them to borrow money against Warehouse Receipt from the Bank or any other Financing agency, but to preserve the stored commodities in a proper and scientific way, to reduce the loss in storage to the minimum and prevent deterioration or damage to the stocks".

17.1. But the problem was not tackled intensively and neither was there any adequate information as to the extent of the problem. The Reserve Bank of India have however, been taking interest since its inception towards the solution of this problem. It is at the initiative of the Reserve Bank of India that the Rural Credit Survey Committee was appointed in the year 1951-52 which laid great emphasis on the importance of developing storage and warehousing facilities as an integral part of the marketing and credit structure. The Agricultural Sub-Committee in 1945 as also the Rural Banking Enquiry Committee in 1950 laid similar emphasis. Accordingly, the Rural Credit Survey Committee suggested the following measures as the broad line of solution of the problem." The establishment of (i) a national board which plans and finances (ii) an All-India Corporation with share capital from the Central Government and from various institutions (iii) state warehousing companies in which the State Government on the one hand and the Corporation on the other, participate and (iv) the Co-operative Societies at the very base of the programme". The recommendations were mostly accepted by the Government of India and the enactment of the legislation on Warehousing Corporation is its outcome. Under the provisions of this legislation the Central Warehousing Corporation and the State Warehousing Corporations in the different States have come into being with the object of setting up warehouses of various capacities in different assembling centres in the country. Under the provisions of the Agricultural Produce (Warehousing Corporation) Act, 1956 of the Government



Morai—Indigenous storage system



A cold storage at Simulia (Ghatal)





of India, a Central Warehousing Corporation and State Warehousing Corporations for the different States have been set up. In West Bengal also a State Warehousing Corporation has been set up which has so far established 30 Warehouses and one Cold Storage in different places of the State, out of which three falls within the district. Recently C. W. C. has started one Warehouse at Kharagpur.

17.2. Midnapore district, which is an one-crop (paddy) area, 88% of the net area sown being covered by paddy alone, provides opportunities for development of storage and warehousing activities. Three warehouses have however since been established in the district one each in Garbeta (Amlagora), Balichak and Belda, where enough of potentialities do exist. We recommend the establishment of more warehouses in concentrated areas like Kharagpur, Chandrakona, Ghatal, Jhargram, Tamruk, Contai, Panskura and Midnapore Town for storage of paddy. This will ensure facilities to the paddy growers of the district.

18. The district provides for about 5 *lac* mds. of potato as marketable surplus grown in the concentrated production belt like Garbeta, Daspore, Chandrakona and Ghatal Police Stations. The growers and traders are facing immense difficulties in storing potatoes grown in the area. They are to undergo serious troubles in carrying these once to the Cold stores situated at a distance in other districts and again bringing them back to the cultivators or consumers at the time of necessity. Besides there is a considerable production of fruits particularly pine-apple and lemon in Ghatal Subdivision which call for immediate establishment of a Cold Storage at Ghatal. There is a proposal for establishment of a Cold Storage at Garbeta in the Public sector by the Government of West Bengal under the 3rd Five Year Plan Scheme. But the need for one such cold-storage of the capacity of 50,000 mds. at Ghatal, in the Public sector preferably, can hardly be over emphasised. The cold storages like warehouses not only help to regulate the flow of supply and aid in stabilization of market price but also save national wealth and adjust proper distribution of same. In spite of the assignment of the the crops, the warehouse vis-a-vis cold storage, will play an important role in the modern economic sphere of the democratic life. Recently four cold storages' one at each of places like Kharghpur, Simulia (Ghatal) Amlagora and Kolaghat have been set up in the Private sector, having, total capacity of four *lac* maunds.

## F. Weights and measures

19. Normally there is no diversity of weights in the district. The standard weight is 80 tolas making a seer and this system is generally followed in all parts of the district. In retail trade hand-scale with wooden, cane or metallic pans are generally used. Measures used are varied and have various local names. Tin cans or metallic containers of convenient sizes and volumes are also in use. The peculiarity of these measures are evident from the prevalence of particular type of measures known as pai, chatti, kona, kunka and poa. The following chart will indicate the conversion rate of such local measures into standard weights.

1 Chatti	= 6 Katcha.
1 Kona	= 6 Chhattaks.
1 Poa	= $\frac{1}{4}$ of a seer.
1 Pie	= $1\frac{1}{4}$ seer.
1 Kunka	= 1 seer.

Metric system of weights is being gradually introduced and has become popular and wider in use.

19.1. In Midnapore district particularly in Jhargram as also in sadar and Ghatal Subdivisions' aboriginal tribes live in quite good number and deal in forest

products as one of their chief means of livelihood. In the marketing of forest products and other agricultural commodities produced by the aboriginals, the standard Bengal maund (40 seers =  $82\frac{2}{7}$  Lb = 1 md.) had been prevalent for long, but exceptions were not uncommon. The diversity of weights and measures was in practice among these aboriginal tribes. Among the Santals and the Lodhas particularly inhabiting in Jhargram Subdivision a system of weights and measures of their own tradition has been in vogue. These are unique in themselves. The system of barter is also there, though such cases are few and far between. The traditional weights in vogue among these tribal people are enlisted below :

**In Jhargram :**

( i ) 4 Mutti	= 1 Chatti.
( ii ) 4 Chatti	= 1 Kone.
( iii ) 4 Kone	= 1 Pie.
( iv ) 1 Pie	= 1 Ch. of paddy.
( v ) 1 Pie	= 8 Ch. of rice.
( vi ) 27 Pai	= 1 Md. of rice.
( vii ) 36 Pai	= 1 Md. of coarse paddy.
( viii ) 40 Pai	= 1 Md. of fine paddy.
( ix ) 8 Pai	= 1 Kuri.
( x ) 16 Kuri	= 1 Ara.
( xi ) 20 Ara	= 1 Bishi.

**In Ghatal :**

( i ) 1 Katha	= $1\frac{1}{4}$ seer.
( ii ) 1 Pali	= $2\frac{1}{2}$ seer.
( iii ) 1 Paa	= 10 seers.

A diagrammatic representation of these traditional type of measures are given. These are of course dying out and specimen of such things are rare to get. These measures are mostly made of wood or cane, but metal made measures are also found. Sometimes these are decorative and are a good sight to see.

**G. Processing.**

20. Paddy and cashewnuts are the two major crops grown in the district and these are processed inside the district before put to sale.

21. Paddy is converted into rice by husking by manual labour or power mill. The system of husking by manual labour is a simple indigenous process of husking the paddy with the help of moiler or by power-driven husking machines. This is commonly known as hand-pounding. Husking by power mill is known as machine-milling. Before husking parboiling is done, which consists in steeping the grains in water and drying by application of heat or other means. This is necessary to toughen the rice kernel so that it may withstand the process of hard-pounding and machine-milling, as the case may be, and also to make the husk more easily removable. Parboiling gives a quarter out-turn than in case of paddy which is not so treated. The cost of parboiling varies from 0.37 up to 0.50 P per md. of paddy. "As regards hulling out-turn the ratio is 3 : 2 and 1 md : 26 seers respectively by hand-pounding process and machine-milling. In this connection it may be noted that "the average paddy grain consists of 23 to 25 p.c. husk, 1 to 2 p.c. cuticle and germ and 74 to 76 p.c. kernel. Normally therefore a sample of paddy reasonably free from extraneous matters as dirt etc., should yield on hulling roughly 74 p.c. of saleable products". (Report on the Marketing of Rice in India-1955). On an average the hand-pounding process yield 2 to 3 p.c. more than what is received



"Dhenki"—the indigenous method of processing paddy

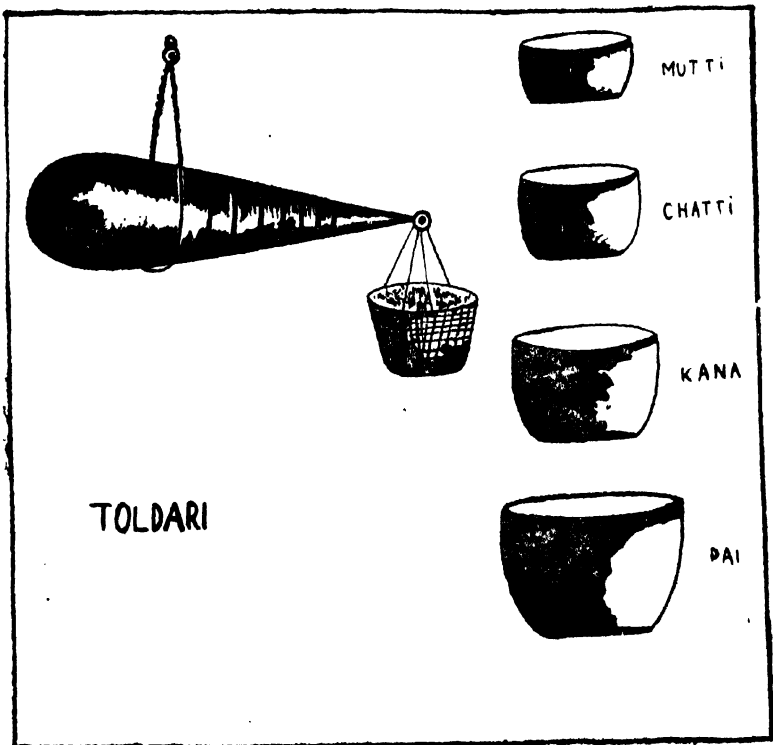


Different stages of milling paddy in Rice Mill





**Indigenous methods of measures in vogue amongst  
backward people**





from machine-milling. Milling charges and average cost of processing paddy into rice in Midnapore district come to as noted below :

Denkhi	— Rs. 1'50 to 1'75 per md.
Rice Mills	— Rs. 1'50       "       "
Husking-Machine—	Rs. 1'50 to 1'75 per md.

22. There are about one hundred Rice Mills in the district. A list of Rice Mills may be found in Appendix—X.

23. Cashewnut is another important crop of the district. An indigenous method of decorticating cashewnut is in existence in the district. According to this indigenous process, picked up nuts are at the first instance dried in the sun for a few days. When the nuts are sufficiently dried these are sliced into two with the help of a "Jati" (a kind of sharp scissors) after which the shells or husks are separated from the kernel. This work is mostly done by women folk in the farmers' family. Processing costs come to about Rs. 8'00 to 9'00 per maund.

## II. Grading and standardisation :

24. Grading determines quality, which is dependent on many complex factors in regard to consumers' requirements. Grading provides incentives for improved production, as quality of any variety affects directly the quality of the produce that is derived out of it. It also ensures the consumers of the quality they want. It reduces trade disputes since transaction may be done on samples without the physical presence of the stock in the place of transaction and it also facilitates quick movement of stock. Under the present day circumstances of complex economic condition grading provides a comparable basis for analysis of prices which the present day Government vitally need for determination of price policy and other policy matters and executive actions.

25. It needs no emphasis to impress the necessity of grading from the point of view of marketing of rice, both for external markets as well as for internal trade. But large number of botanical varieties of rice that are grown in this country and the variations in their characteristics from area to area dependent on soil and climatic conditions, have made the problem complex and multifarious localised types have grown up. Each such varieties have distinct characteristics and those are given trade names and distinctions. But such names are very confusing as the same trade name in some cases is so loosely given to rice of varying physical characteristics, while in other, the same botanical variety is known by different names in different areas. In the midst of such complexities and confusion certain differentiating factors have been evolved and on the basis of such factors rice is usually distinguished. These basic factors are whether rice is (1) fine, medium or bold, (2) raw or parboiled, or (3) machine-milled or hand-pounded. This system of unscientific grades based on visual test of conformation, colour, place of origin, admixture of moisture, stones and other refractions are however very unsatisfactory. As a result certain localised types of rice have acquired specialised demand, from certain communities or from certain areas in India or outside, "The Indian taste is so far educated that there is, in fact, no such thing as rice in general sense. As a Frenchman does wine so the Indian consumer orders his rice by the special name and age in rice is as much appreciated as vintage in wine".

26. Scientific grading of rice as such is not in vogue in West Bengal and more so not in Midnapore. Similar specialised types with district trade-names or trade-descriptions have come up in this State also. Midnapore also grows a large number of fine, medium or coarse varieties. The names of important commercial varieties of rice grown in Midnapore are Sitalal, Panlui, Jhingasal, Rupsal, Balam, Gotti, Patnai, Kalam and Garh etc.

27. Commodity grading under "Agmark" has not been introduced in Midnapore. "Agmark" products are not very popular in this district.

### I. Co-operative Marketing :

28. The growth of co-operative marketing in West Bengal may be dated as 1952. Distress sale of sweet pumpkin and some other types of country vegetables in the district of Burdwan inspired the idea and the first co-operative marketing society was born in West Bengal. It was Hat Dalui Bazar Co-operative Marketing Society. As it was a new thing initially the pioneers i.e. officers of the Marketing Department had to strive hard to bring into line the affected persons and since there was dearth of financial assistance local capital resources, which was proverbially meagre, had to be exploited and this was possible early by the untiring persuasive organising zeal of the pioneers. Accordingly minor commodities like vegetables etc. which required small capital were dealt with. The initial success in the experiment in Burdwan further accelerated the movement and more societies came up in Birbhum, 24-Parganas, Darjeeling and Cooch-Behar districts. The initial capital resources for building the structure was then only inspiration and confidence, in the mind of the co-operators and zeal and organisation fervour in the mind of the pioneer Government officials. This was the first stage.

29. The second stage came up with the introduction of the Community Development Programme. The interest and confidence created in the mind of the farmers were further accentuated when financial assistance in the shape of loan was offered from the Government sources under the C. D. Programme for construction of godowns and as also for provision of working capital. This provision of capital nurtured the infant movement towards growth and development. Large number of co-operative marketing societies grew up and developed in different region of the State and participation in the marketing of major crops like paddy, jute and tobacco got prominence. The position of the marketing societies, which were however, smaller in size with about Rs. 500'00 share capital for each, was consolidated by their participation in fertiliser business. The principle of keeping in deposit the growers' produces could not however, obtain much popularity and outright purchase and store at the society's risk were followed universally. This did not in the consequence lead to any discouraging result as due to confidence, integrity, interest, alertness and strong supervision by the sponsoring Government officials of the Marketing Branch, the societies in most cases obtained profit and they undertook pretty good business. Development in this movement got a further filip during this stage when a further programme of constructions of storage godowns were set up. This period from 1952-1956 may therefore be stated as a period of success for the co-operative marketing societies. The most conspicuous and the most potent force that was working behind their movement during this period was the confidence and trust that was created in the minds of the co-operators for their self-development and better life. It has been observed that so long this trust and confidence persisted the movement maintained its pace. It has become sluggish to-day as it is found since that elemental force which sustained them in the past has died down. So it must be admitted that so long the spirit of co-operation and confidence do not get root in the soil it must be constantly nurtured by a set of people who have in them a confidence and a spirit of organising ability.

30. Any way, the third stage came with the introduction of 2nd Five Year Plan when the movement took a new shape and diverted from its trodden path. A new concept of integrated credit and marketing was injected whereby it was proposed to make the marketing societies as loan collecting agencies working on behalf of the credit societies. Greater amount of financial assistance was given. The State became the partner of the societies and gave out loans and subsidies for





Godown cum office of a Co-operative marketing society



Rice stored in a godown of co-operative marketing society



construction of godowns and also for maintenance of staff for management of the societies. Theoretically the principle got tremendous fan fare and a move with a greater amount of zeal and enthusiasm was given by the Marketing Branch for building up the superstructure on the strong foundation already laid. During the first two years 35 Large Sized Marketing Societies and one Apex organisation were set up in West Bengal and as many as godowns were constructed. First point of the programme was thus achieved but was the other part equally fulfilled? Was integration complete? The answer was still to be given when the policy changed and the pioneers were asked to retreat and others were brought in to guard the rear. The story ends here so far as the originator of the movement is concerned. But still a question remains. Has the principle of integration been successful? The change was perhaps abrupt. The spirit was simply getting its roots and the tree was not mature enough. As a result the growth has been stunted and gradually decay has started.

31. So, it is now time to investigate in to the whole course of development and decay of the movement and find out the causes so that a further step forward may be made for revival.

32. The Co-operative Marketing Societies so far organised in the Midnapore district as well could not thrive in the absence of well meaning and well informed membership, particularly for want of genuine leadership. The achievement of the nine Co-operative Marketing Societies so far organised in Jhargram C. D. P. Block during 1st Plan are noted below :—

Name of Society.	Total No. of membership.	Total No. of share-capital realised.	Amount of loan received from Govt.	Amount of loan covered.	Cash Balance in Bank.
1. Muraboni Society.	52	Rs. 446/-	Rs. 3000/-	Rs. 750/-	Nil.
2. Ledabahera Society.	58	Rs. 550/-	Rs. 1500/-	Rs. 275/-	Rs. 105/-
3. Keudi Society.	52	Rs. 286/-	Rs. 2500/-	Rs. 312/-	Rs. 494'65
4. Dahijuri Society.	35	Rs. 328/-	Rs. 1350/-	Rs. 1050/-	Nil.
5. Central Society	93	Rs. 10940/-	Rs. 30000/-	Rs. 7500/-	Rs. 10992/-
6. Barachandabilla Society.	49	Rs. 245/-	Rs. 1500/-	Rs. 375/-	Rs. 75/-
7. Salboni Society	50	Rs. 250/-	Rs. 1500/-	Rs. 562'50	—
8. Kendisole Society.	50	Rs. 250/-	Rs. 1500/-	Rs. 275/-	—
9. Jhargram Producers' Society.	50	Rs. 3000/-	Rs. 3690/-	Rs. 183'75	

32.1. Of these 9 societies Jhargram Producers' Co-operative Marketing Society has been doing processing activities. This society has installed two plants driven by electric motor one for husking paddy and the other for grinding wheat. Ledabahera Society is carrying on as consumers' store by way of selling daily necessities of life. Keudi Society is not functioning now. This society

sustained loss by carrying on trade in paddy. This Society has given loan to the members to the amount of Rs. 2000/- which is not yet realised. Dahijuri Society now defunct dealing in paddy, canegur etc. so far has incurred loss to the extent of Rs. 100/- in five years. Barachandabilla society is now dealing in paddy and vegetables and functioning well. Kendisole Society is now dealing in paddy and functioning. Over and above it is running a modified Ration Shop. Central Marketing Society is issuing loans on pledge of produce. This society also lent money to members and societies, part of which still lies unrealised. Muraboni Society incurred loss in course of doing business other than agricultural commodities. This society undertook Test Relief Work and acted as distributing of dry doles on behalf of the Government. Salboni Society is not functioning. It incurred loss while doing business. It is learnt that both the societies have gone on liquidation. The possibilities of revitalising these primary marketing societies, except the non-agricultural type are not being considered.

32. 2. During the Second Five Year Plan, some Large Sized Marketing Societies were organised and they took up the marketing of the agricultural produce of their member-growers on co-operative basis to explore the possibilities of getting fair price for their commodities of production.

32. 3. Eleven Small Sized Co-operative Marketing Societies were also organised under 2nd Plan on C.D./N.E.S. Blocks in Contai and Tamluk Subdivisions. Loan amounting to Rs. 68,000'00 were advanced by the Government through Marketing Section to the following eleven societies in the years 1956-57 and 1957-58 as a financial assistance to execute the above scheme.

Name of the Society.	Amount advanced in 1956-57	Amount advanced in 1957-58
1. Charabar Co-op. Agril. Marketing Socy. Ltd.	Rs. 5000'00	Rs. 5000'00
2. Uttar Bhagawanpur Co-op. Agril. Marketing Socy. Ltd.	5000'00	—
3. Itabaria Co-op. Agril. Marketing Socy. Ltd.	5000'00	—
4. Choudhachully Janakalyan Agril. Marketing Socy. Ltd.	5000'00	—
5. Lucky Union Agril. Co-op. Agril. Marketing Socy. Ltd.	5000'00	—
6. Ramchalk Dakshin Malda Agril. Marketing Socy. Ltd.	5000'00	—
7. Khejuri Agril. and Industrial Co-op. Marketing Socy. Ltd.	5000'00	—
8. Bagmari Srikalyan Co-op. Agril. Marketing Socy. Ltd.	5000'00	5000'00
9. Tamluk Union No. XIII Co-op. Agril. Marketing Socy. Ltd.	5000'00	5000'00
10. Tamluk Union No. XII Co-op. Agril. Marketing Socy. Ltd.	5000'00	—
11. Nonhanda Co-op. Marketing Society.	18,000'00	18,000'00

32. 4. These societies dealt in several items of the agricultural commodities like paddy, rice, gur, jute produced locally by their members and arranged marketing at the opportune moment to get fair price for them. Also these

societies have dealt in manures and fertilisers by way of making supplies to their member-growers at the time of cultivation according to their requirements. The total volume and value of transactions made by these societies since they took up the marketing activities, are given below :—

Year	Volume of transactions	Value
1957-58	85,000 Mds. (approx)	Rs. 7,15,255.06
1958-59	25,000 " "	Rs. 6,44,741.00
1959-60	24,000 " "	Rs. 2,32,419.03

### J. Hats and Markets

33. There are as many as 436 markets in the district which include both Village hats and other big markets. These markets may be classified into three classes e.g. A. B. C. depending on the average volume of transaction of the principal commodity or commodities dealt in as well as average volume of attendance. On the basis of this classification these are :—

(i)	'A' Class Markets	—	4
(ii)	'B' Class Markets	—	16
(iii)	'C' Class Markets	—	416

34. A list showing the A. B. C. Class markets in the district may be found in Apperndix IX.

35. The following list gives the names of wholesalers of rice and paddy operating in the district.

### Wholesalers of Paddy and Rice and other principal Agricultural Commodities :

Sl. No.	Name :	Address :
1.	Sri Purna Chandra Makar.	P. O. Tamluk, Dt. Midnapur.
2.	„ Ramkrishna Pramani.	do
3.	„ Kali Charan Dutt.	do
4.	„ Sarat Chandra Maity.	do
5.	„ Sailendra Nath Dey.	do
6.	„ Sakti Baskshi.	P. O. & Vill : Mohisadal, District : Midnapur.
7.	„ Panchanan Sahu.	do
8.	„ Bibhuti Bhusan Maity.	do
9.	„ Sripati Chandra Panda.	do
10.	„ Haripada Sen.	P. O. Tamluk, Dt. Midnapur.
11.	„ Satish Chandra Saha.	P. O. & Vill : Nandakukur, District : Midnapur.
12.	„ Tulshi Sen.	P. O. Tamluk, Dt. Midnapur.
13.	„ Jibankrishna Mahapatra.	do
14.	„ Rakhal Chandra Das.	P. O. & Vill : Teropakia, Midnapur.
15.	„ Sripati Maity.	do
16.	„ Heralal Bhuniya.	P. O. & Vill : Geokhali, Midnapur.
17.	„ Purnalal Bhuniya.	do
18.	„ Kalipada Ojha.	do
19.	„ Amiya Bhuniya.	do
20.	„ Jiban Krishna Bag.	do
21.	„ Badrinarayan Chaudak.	do
22.	„ Srikrishna Panda.	do
23.	„ Surendra Nath Dogra.	do
24.	„ Samar Chand Jain.	Golebazar, Kharagpur, Midnapur.

Sl. No.	Name :	Address :
25.	Sri Chabilal Joshi.	Golebazar Kharagpur, Midnapur.
26.	„ Biswambar Doyal Kandelwala.	P.O. & Vill : Belda, District, Midnapur.
27.	„ Prantosh Laha.	do
28.	„ Ratan Lal Doughar.	do
29.	„ Mahindra Kumar Jain.	Golebazar, Kharagpur, Midnapur.
30.	„ Ganga Narayan Panda.	Vill. & P. O. Khakurda, Midnapur.
31.	„ Rajib Chandra Bhia.	do
32.	„ Gopal Chandra Bhia.	do
33.	„ Madhusudan Paul.	P. O. & Vill : Narayangarh, Midnapur.
34.	„ Ramchandra Doughar.	P. O. & Vill : Bakrabad, Midnapur.
35.	„ Surendra Nath Chowdhury.	Kotbazar, Midnapur.
36.	„ Kheman Chandra Agarwalla.	Colonelgola, Midnapur.
37.	„ Paresch Nath Kundoo.	Tantigaria, Midnapur.
38.	„ Gour Chandra Piri.	Kotbazar, Midnapur.
39.	„ Adinath Chatterjee.	Tantigaria, Midnapur.
40.	„ Giridhari Lal Gupta.	do
41.	„ Rambilas Maskas.	do
42.	„ Darikadas Gupta	do
43.	„ Gouri Sankar Lodha.	do
44.	„ Bijoy Krishna Sujhi.	do
45.	„ Debi Prasad Lodha.	do
46.	„ Kapil Das Tewari.	do
47.	„ Nagar Mal Dhanuka.	do
48.	„ Harisadhan Pandey.	do
49.	„ Bankim Behari Chandra	Radhamohanpur, Midnapur.
50.	„ Navi Lal Hazara.	Ballichak, Midnapur.
51.	„ Balai Lal Koley.	do
52.	„ Dharani Dhar Bhowmic.	Debra, Midnapur.
53.	„ Bijoy Krishana Jana.	do
54.	„ Sasanka Sekhar Dey.	Ballichak, Midnapur.
55.	„ Bikram Chandra Maity.	Radhamohanpur, Midnapur.
56.	„ Radhakrishna Lodha.	Salboni, Midnapur.
57.	„ Karali Chandra Samanta.	do
58.	„ Radhapoda Dandapat.	Keshpur, Midnapur.
59.	„ Bijoy Krishna Roy.	do
60.	„ Harihar Ghosh.	Amlagora, Midnapur.
61.	„ Haricharan Paul.	do
62.	„ Bijoy Roy.	do
63.	„ Ramanuj Ghosh.	do
64.	„ Sachindra Ch. Das.	do
65.	„ Habul Pan.	do
66.	„ Naba Gopal Roy.	do
67.	„ Sakti Sadhan Dey.	do
68.	„ Prabakar Pal.	do
69.	„ Basudeb Chamuria.	do
70.	„ Debiprosad Lodha.	do
71.	„ Bhaskar Bhattacharya.	do
72.	„ Mahim Lal Lodha.	do
73.	„ Bibhuti Bhusan Gar.	do
74.	„ Santi Debi Agarwalla.	do
75.	„ Madan Mohan Bag.	Ghatal, Midnapur.
76.	„ Manik Chandra Poddar.	do
77.	„ Jugal Krishna Paul.	do
78.	„ Banku Behari Meta.	do
79.	„ Kalisadhan Mondal.	do

**List of Jute Merchants :**

Sl. No.	Name :	Address :
1.	Sri Jamunlal Janakripal.	Kolaghat, Midnapur.
2.	„ Pratapal Rameswa.	do
3.	„ Mahesh Chandra Bothra.	do
4.	— Midnapur Commercial Co.	do
5.	— Kolaghat Jute Supply.	do
6.	— Salyanarayan Trading Co.	do
7.	— Ananda Jani Jute Trading Co.	do
8.	— Megna Jute Mill.	do
9.	— Mohini Jute Co.	do
10.	Dipechand Naha.	do
11.	Unanda Jute Mill.	do
12.	Ganeswar Agarwall	do
13.	Satish Chandra Bera.	Geokhali, Midnapur.
14.	Iswar whandra Dalau.	do
15.	Krishna Mondal	Ghatal, Midnapur.
16.	Prankrishna Mondak.	do
17.	Paresh Nath Dey.	do
18.	Sri Ajit Kumar Roy.	Dudkumarh, Midnapur.
19.	„ Jugal Chandra Duary.	do
20.	„ Subal Chandra Bag.	do

**List of Betel-leaves Merchants :**

1.	„ Banamali Jana.	P. O. Tamluk, Midnapur.
2.	„ Surendra Nath Maity.	do
3.	„ Ramgopal Maitra.	do
4.	„ Banamali Nandi.	do
5.	„ Ananda Mohan Bera.	do
6.	„ Jamuna Prosad Chowdhury.	do
7.	„ Ramchuri Chowrasia.	do
8.	„ Ramsankar Mongal Chand.	do
9.	„ Satish Chandra Dutt.	do
10.	„ Haripada Samanta.	do
11.	„ Jagannath Ram Badriprasad.	do
12.	„ Aghar Nath Adhikory.	P. O. Mohanpur, Midnapur.
13.	„ Rajendra Kanti Maity.	do
14.	„ Debendra Pattanaik.	do
15.	„ Nagendra Mali.	P. O. Monkapore, Midnapur.
16.	„ Gostho Behari Adak.	do
17.	„ Chandra Mohan Dutt.	do
18.	„ Lalit Maity.	P. O. Mohanpur, Midnapur.
19.	„ Badri Nath Rui	Kotowali, Midnapur.
20.	„ Ram Hati.	Schoolbazar, Midnapur.

**List of Potato Merchants :**

1.	„ Ajit Chandra Gon.	P. O. Am'agora, Midnapur.
2.	„ Prohlad Chandra Gon.	do
3.	„ Pauchanan Mondal.	do
4.	„ Taranath Gui.	do
5.	„ Haricharan Pan.	do
6.	„ Narondra Nath Pramanik.	Dariband, Midnapur.

Sl. No.	Name :	Address :
7.	Sri Gopinath Chatterjee.	Dariaband, Midnapur.
8.	„ Radhanath Chatterjee.	—
9.	„ Gopal Chandra Pramani.	—
10.	„ Anadi Nath Chatterjee.	—
11.	„ Ganesh Chandra Pramanik.	—
12.	„ Debiprosad Dey.	Schoolbazar, Midnapur.
13.	„ Bhutnath Sen.	do
14.	„ Kartik Chandra Pramanik.	Dariband, Midnapur.
15.	„ Sankar Prosad Chowdhury.	Kotwalibazar, Midnapur.

#### List of Cashew-nut Merchants :

Sl. No.	Name :	Address :
1.	Sri Baikuntha Nath Mahapatra.	P. O. Contai, Midnapur.
2.	„ Radhakrishna Sanhu.	P. O. Satmile, Contai, Midnapur.

#### List of Tobacco Merchants :

1.	Sri Anil Kumar Das.	Schoolbazar, Midnapur.
2.	„ Labju Madhab Jee.	—
3.	„ Banarasi Swami.	—
4.	„ Virji Dharamji.	—

#### K. Market Intelligence :

36. Market Intelligence services form an integral part of agricultural marketing. The services are constituted for collection of market information like prices, arrivals, stock, despatch, market trend and sentiment, crop prospect etc. and dissemination of the same through various media like publication of periodical bulletins and reviews on prices and market situation through the radio, telegram and telephone. On accurate and efficient market intelligence services depends the cropping pattern of the farmers. Prof. Thomson has thus defined market information as "Market information is a broad term used to designate all facts and their interpretation bearing on the present or prospective market value of commodities."

37. At present the wholesale prices of commercially important articles are collected by the Subdivisional Agricultural Marketing Officers from some of the important representative selected markets and despatched to Head Quarters for publications of Weekly Price Bulletin. Prices are collected from those selected representative markets are assembling centres on the weekly hat days. Daily retail prices of rice, Monday retail prices of agricultural commodities, weekly wholesale prices of rice, paddy, jute, oilcakes are collected separately from the selected markets for direct submission to the Additional Director of Agriculture (Marketing), West Bengal to study the economic situation and trend of markets etc.

38. Under the Integrated Market Intelligence Scheme, two price reporting centres have been set up under 2nd Plan, one at Contai and the other at Balichak wherefrom prices of rice are telegraphically being reported to "ECOSTAT" and Addl. Director of Agriculture (Marketing), West Bengal on each bi-weekly hat day from Contai and daily from Balichak to study the trend of market of food-grains particularly of rice. Also the prices of rice both wholesale and retail of different markets are being disseminated on a board for information to the people in the trade and general public. The "ECOSTAT" and Addl. Director



of Agriculture (Marketing), West Bengal are also being furnished regularly on each week the information as to the stock position, arrivals and despatches of agricultural commodities. The works of the Market Intelligence Scheme at Ballichak and Contai were started under 2nd Plan whereas that of the price reporting centres like Dudkumra, Lankagarh, Panskura, Monglamaro and Potashpur subsequently during the later months of '61 and early in '62. The work of these price reporting centres were being managed by the concerned V. L. Ws at a fixed honorarium for the selected commodities concerned, in addition to their normal duties. The work of Subdivisional Hqr. Markets of Tamluk, Ghatal and Jhargram under the scheme was being managed by the respective Subdivisional Agricultural Marketing Officers till Market Reporters under 3rd Plan were appointed there.

39. The following price chart for 1959 will show seasonal variation in price (rice prices for the year 1958 are indicated here as there was an overall control on the prices of rice during the year 1959) as prevailing in the district.

TABLE-O  
Variation in prices—1959  
(in rupees)

Month	Jute	Rice	Cashew- nut	Betel- leaf	Potato Nainital	Groundnut
January	18'17	20'62	97'00	6'90	9'80	N. S.
February	17'50	21'60	102'50	6'25	7'95	20'00
March	19'00	21'95	105'00	6'00	10'12	22'00
April	15'75	22'75	121'25	6'12	11'12	23'00
May	18'66	24'00	104'00	6'20	13'30	24'00
June	19'25	25'37	87'50	5'25	17'62	25'00
July	19'00	26'87	87'50	3'25	19'12	26'00
August	21'25	27'20	88'00	2'35	20'22	26'00
September	22'37	27'75	96'25	1'44	N. S.	26'00
October	24'63	26'30	110'00	4'63	N. S.	N. S.
November	24'63	26'30	110'00	4'62	N. S.	N. S.
December	27'12	23'50	122'50	7'00	N. S.	N. S.

40. A list of commercially important farm products of the district :

(1) Rice, (2) Paddy, (3) Jute, (4) Betel-leaf, (5) Cashewnut, (6) Mung, (7) Urid, (8) Gram, (9) Potato, (10) Onion, (11) Sweet-Pumpkin, (12) Sheep, (13) Goat, (14) Fowl, (15) Hen-egg, (16) Firewood, (17) Sal-leaves, (18) Butter, (19) Khrshari, (20) Chhana, (21) Milk (Buffalo), (22) Gur, (23) Paddy-straw, (24) Mung (Split), (25) Masur (Split), (26) Gram (Split), (27) Mustard Oil, (28) Mustard-Cake.

L. Marketing of Live-stock and Poultry birds :

41. On hat days the animals are assembled through a class of intermediary known as "bepari". Intending purchasers like cultivators, individual consumers, agents of slaughter houses assemble in the hats to make their purchases. The buyer goes round the market to find out his choice and when this is made open bargain begins and the price is settled by higgling.

Then both the buyers and sellers approach the proprietor or his agent or the Izaradar of the market as the case may be to have a receipt, which works as a token of authorised transaction, on payment of certain charges as is generally borne by both the buyer and the seller. The features of the system of marketing of livestock in the district are as thus :

- i) Straight transaction takes place between the buyer and seller.
- ii) Brokers or intermediaries also operate.
- iii) Brokers also make independent purchases for resale. In such cases tax is levied on brokers at reduced rates.

42. There are a good number of Cattle markets in the district, a list of which may be found in the Appendix XI.

43. Poultry birds and eggs are also sold in good numbers in almost all the markets of the district. Small Farias move from village to village and collect poultry and eggs from house to house and assemble them in the markets or hats. Transaction of poultry birds and eggs in the hats is effected mainly in the retail sectors. Prices are fixed according to size and quality. Poultry birds and eggs are also exported outside the district, mostly to Tatanagar.

## CHAPTER—VI

### Trade and Transportation

1. As Midnapur is predominantly an agricultural district, the agricultural goods predominate over other goods in normal trade. Jute, Rice, Betel-leaf, Pulses, Cashewnut and Potato are the most important commercial crops normally being transacted in the district trade, though cashewnut and sugar-cane (candy) have started to occupy predominance in recent years. Besides, mention may be made of the forest products and that of the mat industry prepared out of weeds grown in swampy lands of the Eastern Zone. Handloom industry in respect of cotton-cloth is also adding much to the volume of trade of the district.

2. The nature of trade in different commercially important articles as is in vogue, both inward and outward, is noted separately in the two tables given below :

TABLE (Items of Export)

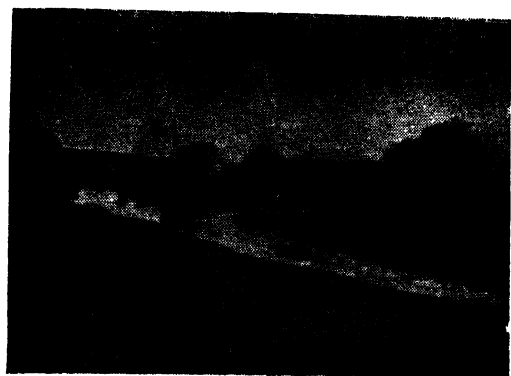
Main items of export	Destination of Export	Volumes and percentage of export	Agencies
Rice	Calcutta, Howrah, Hooghly, 24-Parganas & Nadia.	20,00,000 Mds. 12%	Millers Traders
Pulse	Bankura, Calcutta.	20,000 Mds. 20%	do
Betel-leaf	Bihar, Orissa, U. P., M.P., Andhra, Madras, East Panjab, Himachal Pradesh, Rajasthan and other districts of West Bengal.	8,00,000 Mds. 65%	Growers, Beparies, Merchants, Exporters.
Jute	Calcutta and Suburbs.	4,37,000 Mds. 99%	Traders, Exporters.
Cashewnut	Calcutta, Bombay, Kerala, Cochin.	11,250 Mds. 95%	do
Potato	Orissa, Bihar, Calcutta, Bankura, Burdwan.	2,50,000 Mds. 65%	do

TABLE (Items of Imports)

Main items of import	Source of Import	Volume and percentage of import	Agencies operating
Wheat	Calcutta	15,00,000 Mds. 98%	Govt. agents and approved dealers
Potato	Bihar, Madras, U. P., Calcutta.	10,00,000 Mds.	Merchants, dealers
Onion	Bombay, Madras, Calcutta	4,00,000 Mds. 50%	do
Pulse	Calcutta, U. P., M. P. Bihar.	7,00,000 Mds. 55%	do
Rape and Mustard	E. Punjab, M.P., Gujrat Rajasthan, U. P. and Calcutta.	3,00,000 Mds. 90%	Mills, Merchants, Dealers.
Paddy	Orissa	20,000 Mds. 1%	Millers

3. Among the means of transport, rail, road and river are important, connecting urban and rural areas with connected feeder roads or feeding markets. Agricultural produce mainly Rice, Wheat, Gram, Pulses, Jute, Potato etc. are carried from producing areas to consuming markets by rail and sometimes by road or river but the volume of transport by rail is about 60% while that by road and river is about 25% and 15% respectively. Supply of railway wagons is not always adequate and as such alternative road transport of essential and perishable commodities by truck has increased in recent times. Besides, for safe, easy and quick transport road transport has become a happy rival of rail transport. River transport by boat from Ghatal, Kolaghat, Contai and Tamluk area of rice, pulses, jute and vegetables to Calcutta market is noteworthy. In villages and local markets bullock-carts and bullocks have always rendered useful services suitable for local conditions. However, it should be noted that there is great scope of improving the means of transport for facilitating agricultural marketing more effectively.

4. The cost of transport is always a conditional factor in the system of agricultural marketing and the formation of price. Hence cheap, quick and easy transport is of paramount importance. The cost of transport by rail is lesser than that of truck and the cost of transport by boat is the least (but risky) than that of cart transport. Generally, village producers take the advantage of cart transport than by truck while the big businessmen and Aratders are accustomed to get the benefit of rail and road transport more advantageously. Railways are the chief means of transport from assembling to the terminal markets. The Rly. freight (goods rate) from Jhargram to Calcutta for instance, comes to Rs. 1'33 per 100 Kilogram in case of paddy and pulse and Rs. 6'33 in case of rice. The telescopic schedule rate varies according to distance and classification of the commodities. Rate of charge of Motor Lorries being 0'31 P. per md. in pucca road and 0'50 nP. per md. in case of kutchra road for 10 miles. Goods moved on head-load cost 0'50 P per md, by cart 0'25 P per md. by



Loaded Boats on Sail (Tamluk)



Boats awaiting for loading at a secondary  
market (Dudkumra hat )



rickshaw 0'25 P. per md., by boat 0'06 P per md. and by bullock 0'19 P. per md. per mile as prevalent in different places.

5. Different kinds of containers are used for the purpose of marketing of goods, the most important being gunny bags used for storing important agricultural commodities like paddy, rice, potato, pulses, etc. Jute is handled in bales and as there is no jute processing plant in this district, excepting Kolaghat, jute is carried by stacked process from interiors. Vegetables are carried in gunny bags or bamboo baskets while egg etc. are carried in bamboo baskets only. Marketing of egg through improved containers like wooden baskets is not yet in vogue. The cost of gunny bags is higher than that of other containers and generally gunny bags contain an increased volume (two maunds) of commodity (rice and paddy etc.). The importance of good and proper containers cannot be over emphasised.

## CHAPTER—VII

### MISCELLANEOUS :

#### A. Information of Special Interest—Religious & Historical

##### 1. Midnapur :

It is an ancient town exhibiting its importance from the days immemorial. It has earned its importance as a Hqr. Station from the days of the Mughals. Besides, it has got its religious importance having had several shrines namely Jagannath Temple, Sitala Temple, Durga Temple, Siva Temples etc. of the Hindus and Ali Shaheb's Darga and a few Mosques etc.

##### 1.1. Birsing :

Being the birth place of Pandit Iswar Chandra Vidyasagar this village situated in the Subdivision of Ghatal became famous. Vidyasagar's contribution to the development of early Bengali language and literature is of paramount importance and for his sagacity of character and deep sincerity he earned the reputation and admiration not only from his countrymen but also from the Europeans. The Government of India had taken steps to preserve the old house of Vidyasagar as an important national asset.

##### 1.2. Tamluk (Tamralipta) :

It was an old city and reputed sea-port from the days of Vikramditya. The celebrated temple of Barghaviina is curious in its shape, construction and architecture and reminds one of the Budha Gaya. It is at present a Subdivisional Hqr. in the district and a seat of culture and education.

##### 1.3. Karnagarh :

It is a historical place of importance 6 miles of (North) from Midnapur Town. The remains of an ancient fort (Garh) and of many temples are even now seen as evidence of its previous prosperity.

##### 1.4. Chandrakona :

It is situated at a distance of 37 miles from Midnapur and famous for its Garh (fort) Baraduari of ancient Hindu Kings—and several old temples of Laljeu, Raghunathjee and Mahadev. It was formerly a rich and prosperous town.

##### 1.5. Danton :

Placed at a distance of 40 miles from Midnapur town—this place is famous for providing as a rest house for Sri Chaitanya Dev, the great religious reformer. Two large tanks one, "Sarasanka" and other 'Bedhaban' and several other temples including that of "Syamaleswar" are places of interest.

##### 1.6. Digha :

About 50 miles off Kharagpur and in Contai Subdivision, Digha, the Brighton of India stands ashore the Bay of Bengal. The Digha of to-day was not the same as was in the pre-Independence days. Only a few Europeans and their associates knew the place and occasionally came here. Since the attainment of Independence, its complexion began to change. The State Government after due





Vidyasagar's birth place (Birsingha)



A Panoramic View of Digba Mela

consideration, took up the matter and decided to develop Digha to attract tourists. Digha Development Project was formed and the development of Digha was vested in it. More than 20 self-sufficient Bungalow units have been constructed by the Government. Besides these, there are two private residential hotels. The Government contemplates to establish a 'Labour Holiday Home' and also to construct multi-storied Bungalows for middle-income group of the people.

The development of Digha is not yet complete. Every year, quite a good number of people come here to enjoy the solitude of the Nature, to witness the sunrise and sun-set and to enjoy their holidays at a lonely place far from the madding crowd. The lovely beach beckons them. Compared to other beaches this lovely beach presents quite a different picture. The beach is hard enough to withstand the landing of a light aircraft and quite fit for motor-driving. Its berch grooves, gigantic sand-hills all are pleasant sight to see.

The tourists have also in store for them more pleasure there. Every year on the Makar Sankranti day, people from far and near of different cast and creed assemble there in the Mela on the beach. The Government has established an ideal market there in a two-storied building.

Besides, within the vicinity of Digha there lies the Cashewnut growing belt. There is possibility of establishment of a mechanised processing centre for Cashewnut which is grown abundantly.

#### 1. 7. Haldia :

From a pretty long time, the necessity of a subsidiary port in the Eastern Sector of the country was keenly being felt. The development of the country as per programme under different plans and consequent congestion in the existing port in Calcutta and in order to relieve pressure from the Calcutta Port, the Government on the advice of experts decided to construct a port near about Calcutta. Haldia was chosen for the purpose after considering all aspects. The proposed port is scheduled to be constructed at the delta of the River Ganges, and Haldia. The proposed site will be about 40 miles from Tamluk. The construction of the rail line between Haldia and Panskura is on the vertex of materialisation. An Oil Refinery has been proposed to be set up at Haldia. The proposed port, having different rail links with the rest of the country, stands for prosperity of the district and the country as a whole. Ships from outside the country will come down to the port, the cargo will be unloaded and then these will be despatched by rail and river to destinations within the country. The ships in return voyage shall carry in them the products of our country. This is a picture of the near future.

At present acquisition of land for the harbour and other industry proposed to be set up under Public Sector and arrangement for rehabilitation of the displaced people are going on in good speed.

#### B. Soil Conservation :

A soil conservation Scheme has been taken up in this district in Garbeta-Keleghai, Goaltore etc. with a view to change the structure of the Soil. Vast untractable areas have been converted into arable lands after reclamation. At Keleghai and Garbeta—a refugee rehabilitation Scheme and at Goaltore a Scheme for Rehabilitation of Scheduled Tribes have started. These Schemes are important not only from economic point of view in producing crops in the once barren lands but also its humanitarian aspect could not also be minimised by its attempt to rehabilitate the distressed people of the locality as well as East Bengal Refugees. The importance of these Schemes bear testimony to agricultural development as an unique achievement almost equal to agricultural revolution in the district.

### C. Cottage Industry :

Amongst the industries besides a Railway Work-shop in Kharagpur all other may be included in the category of Small Scale or Cottage industry amongst which Silk Industry at Chandrakona and Ghatal (adjacent to Vishnupur) and Tamluk have got their old reputation, though the present condition is unhappy. At present such industries are being carried on in Pingla, Debra, Keshpur, Potash-pore, Gopiballavpur, Ramjibanpur, Amarshi, Nimtala, Radhamoni hat, Ghatal, Contai, Khasbar, Rajnagar, Kuapur, Khirpai, Chandanpore, Panihati, Muchibandh, Golulnagar, Basantachak, Bishnumishrachak, etc. Mating occupies the third position and is mainly localised in the areas producing the raw materials like Egra, Pingla, Sabong, Panskura, Raghunathbari, Keshijora, Narajole, Ramnagar, etc. Brass metal which occupies a conspicuous position is mainly localised in Nanadapore of Sadar Subdivision and Ghatal, Kharar, Chandrakona and Ramjibanpore of Ghatal Subdivision besides the Midnapore town itself. The salt making in the coastal line and preparation of Tal Gur (Palmiara) in a few locality are also being resorted to simultaneously.

## **APPENDIX A**

- I. Monthwise Rainfall in inches and percentage relation to total rainfall of the district for the year 1957-1961.
  - (A) Subdivisionwari month-wise rainfall of the district for the year 1960-1961.
  - (B) Chart showing monthwise rainfall (in percentage compared to total) of different Subdivisions of Midnapore for the year 1960-1961.
- II. (A) Road system in Midnapore district.  
(A) Results of analysis of surface soil.
- III. Police Stations and their Areas.
- IV. Unions and their areas.
- V. Area under principal crops including fruits (period 1954-55 to 1961-62).
- VI. Average yield per acre.
- VII. Average production of the principal crops including fruits (period 1954-55 to 1961-62).
- VIII. A complete price-spread of a few major commodities of the district.
- IX. List of Markets.
- X. List of Rice Mills.
- XI. List of Cattle Markets.
- XII. List of important Fairs and Melas.

## **APPENDIX B**

- I. Graphs and Charts

## APPENDIX—I

( Vide Chapter—I )

Month-wise Rainfall in inches and p.c. relation to total rainfall of District Midnapore for the year 1957 to 1961.

Name of the month	1957		1958		1959		1960		1961	
	Rainfall	p.c. to the total	Rainfall	p.c. to the total	Rainfall	p.c. to the total	Rainfall	p.c. to the total	Rainfall	p.c. to the total
January	1.71	4.79%	0.16	0.25%	0.63	1.00%	nil	nil	0.29	0.39%
February	1.90	4.27%	3.98	6.44%	0.92	1.40%	"	"	2.95	3.89%
March	0.31	0.69%	0.75	1.21%	1.43	2.01%	1.22	1.75%	0.00	0.00%
April	nil	nil	1.20	1.94%	2.65	3.90%	0.25	0.36%	1.39	1.68%
May	0.29	0.65%	4.04	6.54%	2.66	3.91%	6.73	9.69%	2.33	3.35%
June	5.88	13.22%	4.46	7.22%	7.28	10.72%	8.92	12.84%	19.11	24.95%
July	5.20	11.69%	14.91	24.14%	12.34	18.27%	19.69	28.35%	10.93	14.27%
August	18.44	41.26%	7.82	12.66%	10.07	14.83%	18.91	27.23%	16.67	21.77%
September	9.74	21.23%	20.50	33.85%	15.74	23.18%	7.30	10.51%	20.55	26.70%
October	9.98	2.20%	2.83	4.58%	14.06	20.70%	6.40	9.25%	2.35	3.00%
November	0.00	0.00%	0.69	1.17%	0.06	0.08%	0.02	0.02%	0.00	0.00%
December	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%

\*\* Figures are taken from the record of State Agril. Farm, Midnapore.

# APPENDIX I (A)

( Vide Chapter - I )

Subdivisionwari Month-Wise Rainfall of the District of Midnapore  
for the year 1960 - 61 (in inches)

Month		Jhargram	Tamluk	Contai	Ghatal	Midna- pore (N)	Midna- pore (S)
April	'60	0'38	2'30	—	—	—	—
May	"	2'35	6'00	13'64	11'90	6'72	3'85
June	"	6'90	4'70	6'32	3'30	8'94	3'88
July	"	12'81	18'04	10'42	14'10	20'34	8'98
August	"	12'63	12'62	17'52	12'45	18'85	18'56
September	"	11'42	13'40	14'78	11'07	18'25	13'17
October	"	4'73	13'32	6'60	0'32	6'40	3'05
November	"	—	—	—	—	—	—
December	"	—	—	—	—	—	—
January	'61	—	0'92	0'40	—	0'29	0'45
February	"	1'55	6'32	4'73	4'85	0'64	0'60
March	"	—	6'62	0'16	—	—	—

\*\*Figures are taken from the record of the State Agril. Farm Midnapore.

# APPENDIX - I (B)

( Vide Chapter - I )

Chart showing Month-wise Rainfall (in percentage compared to total) of different  
Subdivisions of Midnapore District for the year 1960 - 61.

Month		Jhargram	Tamluk	Contai	Ghatal	Midna- pore (N)	Midna- pore (S)
April	'60	0'70%	3'7%	—	—	—	—
May	"	4'40 "	7'1 "	18'13%	20'52%	8'13%	7'3%
June	"	13'00 "	5'5 "	8'00 "	5'9 "	12'00,,	7'4 "
July	"	24'3 "	21'29,,	14'30 "	24'13 "	25'8 "	17'0 "
August	"	21'00 "	15'37,,	23'00 "	21'14 "	23'4 "	35'3 "
September	"	21'7 "	16'0 "	19'00 "	19'00 "	22'55,,	25'0 "
October	"	9'8 "	15'87,,	18'48 "	0'5 "	8'9 "	5'2 "
November	"	—	—	—	—	—	—
December	"	—	—	—	—	—	—
January	'61	—	1'00,,	0'55 "	—	0'36,,	0'8 "
February	"	2'9 "	7'5 "	5'20 "	9' 7 "	0'75,,	1'0 "
March	"	—	9'8 "	0'34 "	—	—	—

\* Figures are taken from State Agriculture Farm, Midnapore.

## APPENDIX—II

(Vide chapter—I).

### Road system in Midnapore District

Name of Road	Market and Localities served	Distance
1. Keshpur to Chandra-kona	Kuapur, Neradual, Bumpat	13'20 miles.
2. Midnapore,-Keshpur-Narajole.	Midnapore, Panchkuri, Keshpore, Narajole, Lankagarh, Amdubi.	23'10 „
3. Debra,-Marotala Cossi-bank Road.	Loada and Marotala	6'11 „
4. Chandrakona,-Simli-ghat.	Chandrakona Road, Digri, Goaltore, (Suranga),	26'00 „
5. Khirpai-Ramjibanpur (extended to Arambagh)	Jara, Ramjibanpur	10'75 „
6. Barada Kharar Road	Barada and Kharar	4'00 „
7. Birsing-Radhanagar Road upto Kharar Municipality.	Birsing and Radhanagar	11'28 „
8. Belda-Keshiery-Naya-gram.	Belda, Keshiery, Nayagram	16'00 „
9. Guptomoni, Sankrail- (extended to Rohini and Kultikri).	Sankrail, Rohini and Kultikri	12'00 „
10. Potashpore Bangachak	Potashpur and Bangachak	17'50 „
11. Moyna-Paramanandapur, Pingla.	Pingla, Paramanandapore	14'50 „
12. Kharagpur-Keshiery.	Hijli, Keshiery	16'00 „
13. Debra-Sabong	Balichak, Mundamari, Jamuna, Temathani, Junkapore.	16'75 „
14. Feeder Road from-Debra-Sabong Rd. to Ping P. S.	Mundamari, Pingla	13'25 „
15. Panskura-Ghatal Rd.	Khukurda, Sonamai, Chinchre, Nimtala, Ghatal.	22'00 „
16. Mechada-Tamluk Rd.	Mechada and Tamluk	10'00 „
17. Tamluk-Moyna	Tamluk and Moyna	11'36 „
18. Mohisadal-Geokhali	Mohisadal-Geokhali	4'13 „
19. Old D. B. Road leading to Narghat Ferry	—            —	1'00 „



Name of Road	Markets and localities served	Distance
20. Khejuri-Karia	Khejuri and Karia	13'00 miles.
21. Dhakin Sitala Dantan Pathra	Dakin Sitala and Dantan	14'30 „
22. Contai-Khejuri Rd.	Khejuri	8'00 „
23. Mohanpur Solepathra, Sonakamia Road.	Mohanpur and Egra P. S.	13'27 „
24. Harin-Mung, Baria Rd.,	Haria, Mugbaria	6'00 „
25. Bhagawanpur Bajkul Rd.	Bhagawanpur and Bajkul	7'14 „
26. Gopiballavpur-Nayagram	Gopiballavpur and Nayagram	8'00 „
27. Gopiballavpur to Feku-ghat-Jhargram	Gopiballavpur, Jhargram P. S.	25'50 „
28. Jhargram-Jamboni	Jhargram, Jamboni and Gidney	7'00 „
29. Dharua-Belpahari	Belpahari and Binpur P. S.	16'00 „
30. Dudkundi-Manikpara, Sardia Bombay Road	Jhargram P. S. Khargpur P. S.	25'00 „
31. Dahijuri Binpore Silda Road.	Binpore P. S.	20'00 „
32. Panskura-Tamluk	Panskura P. S.	16'00 „
33. Contai-Junput	Contai and Junput	6'00 „
34. Egra-Potashpur	Potashpur and Egra	8'12 „

**(B. Under public works department)**

35. Tamluk-Contai Road	Basudebpur, Narghat, Kalinagar markets	38'00 „
36. Basudebpur-Sutahata Road.	Basudebpur, Mohisadal, Sutahata markets	19'00 „
37. Mohisadal-Nandigram Rd.	Mohisadal and Nandigram	13'00 „
38. Chaityanyapur Kukrahati Road.	Chaityanapur and Kukrahati	4'00 „
39. Conti-Digha Road	Ramnagar, Jagadishpur.	20'12 „
40. Contai-Belda Road	Contai, Egra, Khakurda, Belda, Jahalda	35'83 „
41. Contai-Dharua Maidan Road,	—	1'25 „
42. Digha Foreshore Rd.	—	1'25 „
43. Dahijuri Rd. to Township	—	0'47 „

Name of Road	Markets and localities served	Distance
44. Raniganj Midnapore Rd.	Garbeta, C. K. Rd. Salboni, Midnapore	36'00 „
45. Pilgrain Road	Midnapore P. S.	4'00 „
46. Lodhasuli Dohijura Rd.	Lodhasuli, Salboni, Jhargram, Dahijuri, Purano-Jhargram	12'70 „
47. D. T. Road.	Kharagpur, Belda, Dantan	42'00 „
48. Dahijuri Kupanadi Rd.	—	13'30 „
49. Chandrakona-Ghatal Rd.	Debcha, Digri, Baherasole, Banka, Chandrakona (town), Khirpai, Radhanagar, Baroda, Ghatal.	27'00 „
50. Godapiasal-Anandapur	Anandapur	6'00 „
51. Anandapur-Keshpur	Anandapur and Keshpur	3'00 „
52. Midnapore-Lalgarh	Midnapore, Salboni and Binpur P. S.	36'00 „
53. Lodhasuli-Mahapl	Lodhasuli and Mahapal markets	6'00 „
54. Amlagora-Kharkusuma	Amlagora and Kharkusuma	9'00 „
55. Tamluk-Teropakia	Tamluk and Nandigram P. S.	15'00 „
56. Contai-Deuli	Contai and Deuli markets	16'00 „

## APPENDIX—II (A)

## Chapter—I

Result of analysis of surface soil (Results on over dry basis)

Midnapore district

Contents	Midna- pore Sadar	Daulat- pur (Contai)	Midna- pore Farm Sample No. 1	Midna- pore Farm Sample No. 2	Midna- pore Farm Sample No. 3	Midna- pore Farm Sample No. 4	Gar- beta Sabong	Hans- para	Murad- pur	Jhargram Sample No. 1	Jhargram Sample No. 2
i) Moisture (p.c.)	—	—	—	—	—	—	—	—	—	—	—
ii) Organic carbon (p.c.) 0'419	—	—	—	—	—	—	0'867	0'836	—	—	—
iii) Loss of solution (p.c.)	—	—	—	—	—	—	—	—	—	—	—
vi) Coarse sand (p.c.)	—	—	—	—	—	—	—	—	—	—	—
v) Fine sand (p.c.)	—	—	—	—	—	—	—	—	—	—	—
vi) Silt (p.c.)	—	—	—	—	—	—	—	—	—	—	—
vii) Clay (p.c.)	—	—	—	—	—	—	—	—	—	—	—
viii) Carbonate (p.c.)	—	—	—	—	—	—	—	—	—	—	—
ix) Total soluble salt (p.c.)	—	0'9600	—	—	—	—	—	—	—	—	—
x) Loss on igrition (p.c.)	—	—	—	—	—	—	—	—	—	—	—
xi) Nitrogen (p.c.) 0'049	—	—	0'0157	0'0301	0'0210	0'0196	0'078	0'080	0'090	0'0320	0'0284
xii) P <sup>2</sup> O (p.c.)	—	—	0'0375	0'0250	0'0383	0'0271	—	—	—	0'0760	0'052
xiii) K <sup>2</sup> O (p.c.)	—	—	0'4760	0'5236	0'3995	0'4350	—	—	—	0'6800	0'8106
xiv) PH	6'8	—	—	—	—	—	6'3	7'7	6'8	6'3	6'5

( Reproduced from Census District Hand Book—1951 )

# APPENDIX—III

(Vide Chapter II)

## Police stations and their areas

Subdivision	Police station	Area in sq. miles	No. of inhabited village	No. of towns
Sadar	Midnapore	130'1	216	1
	Salbani	213'3	379	
	Keshpur	185'9	518	
	Garbeta	408'4	733	1
	Debra	132'2	454	
	Kharagpur local	214'4	534	
	Kharagpur town	12'9	—	1
	Narayangarh	194'6	437	
	Danton	170'7	301	
	Mohanpur	54'3	98	
	Sabong	120'4	221	
	Pingla	86'3	170	
Contai	Contai	196'1	553	1
	Khejuri	164'8	131	
	Bhagwanpur	140'0	317	
	Potaspur	138'2	273	
	Ramnagar	116'9	258	
	Egra	155'6	241	
Tamluk	Tamluk	94'0	185	1
	Panskura	154'7	354	
	Moyna	57'3	83	
	Mohisadal	124'9	249	
	Nandigram	190'9	198	
	Sutahata	127'3	198	
Ghatal	Ghatal	89'8	140	2
	Daspur	127'9	243	
	Chandrakona	150'8	243	3
Jhargram	Jhargram	208'3	182	1
	Jamboni	126'1	275	
	Binpore	365'0	805	
	Gopiballavpur	184'9	483	
	Sankrail	106'4	275	
	Nayagram	195'2	257	
TOTAL :—		5,253'1	10,517	11

(i) (a) Agricultural Geography of West Bengal

(b) Agricultural Statistics (1944-45) by H. S. M. Ishaque, I.C.S.

# APPENDIX—IV

( Vide Chapter II)

## Unions and their areas

Police station	Name of Unions	Area in sq. mile	Area in acres/correct to the nearest approx. up to the decimal point
Midnapore	Dhema	18'64	11,929'60
	Chandra	16'23	10,387'20
	Manidaha	19'56	12,518'40
	Tatigaria	17'26	11,046'40
	Shiromoni	15'70	10,048'00
	Panchkuri	15'50	9,920'00
	Banpura	13'29	8,505'60
	Pathra	13'92	8,908'80
Salbani	Birampore	16'31	10,438'40
	Debagram	13'51	8,646'40
	Bishnapur	14'37	9,196'80
	Salbani	13'33	8,531'20
	Tarapara	14'79	9,465'60
	Barakeundi	18'19	11,641'60
	Mia para	14'77	9,452'80
	Bhimpur	14'85	9,504'00
	Salpati	14'95	9,568'00
	Jalhari Moupal	16'40	10,496'00
	Garmal	15'26	9,766'40
	Kashijora	16'44	10,521'60
	Godapiasal	14'35	9,181'00
	Karnagarh	15'78	10,099'20
	Jarakandi	12'50	8,000'00
Keshpur	Soldiha	12'91	8,262'40
	Sirsha	11'75	7,520'00
	Amanpur	10'92	6,988'80
	Golar	11'34	7,252'00
	Maghasan	22'52	14,412'80
	Jagannathpur	11'64	7,449'60
	Tegharai	13'19	8,441'60
	Amrakadi	7'01	4,492'80
	Anandapur	9'06	5,798'40
	Keshpur	9'06	5,798'40
	Kalagram	7'21	4,614'40
	Sarishakhela	11'82	7,564'80
	Dhalhara	11'00	7,040'00
	Jhetala	12'41	7,942'40
	Enayetpur	11'55	7,392'00
Garbeta	Kedra	8'00	5,120'00
	Sandipur	12'00	7,680'00
	Baramarra	9'00	5,760'00
	Shyamnagar	11'00	7,040'00
	Dhadika	15'00	9,600'00
	Agra	9'00	5,760'00
	Benachapra	14'00	8,960'00

Police station	Name of Unions	Area in sq. mile	Area in acres/correct to the nearest approx. up to the decimal point
Debra	Jagardanga	12'00	7,680'00
	Amlasali	11'00	7,040'00
	Makli	19'00	12,160'00
	Patharpara	18'00	11,520'00
	Sarabat	15'00	9,600'00
	Jirapara	23'00	15,720'00
	Pingboni	14'00	8,960'00
	Goaltere	9'00	5,760'00
	Gohaldanga	16'00	10,240'00
	Piashela	13'00	8,320'00
	Nalbona	16'40	10,496'00
	Amkopa	13'00	8,320'00
	Amlagora	14'00	8,960'00
	Sankarkata	14'00	8,960'00
	Nayabasat	13'00	8,320'00
	Satbankura	17'00	10,880'00
	Uraishai	16'00	10,240'00
	Amsol	14'00	8,900'00
	Karsha	15'00	9,600'00
	Garanga	17'00	10,880'00
	Garbeta	4'00	2,560'00
	Kharkashma	15'00	9,600'00
	Rashkanda	12'00	7,680'00
	Bhabanipur	10'03	6,419'20
	Jagannathpur	9'71	6,214'40
	Satyapur	11'84	7,577'60
	Khana Mohan	11'18	7,155'20
	Debra	15'00	9,600'00
	Jalimanda	14'00	8,960'00
	Malighati	10'72	6,860'80
	Golagram	12'28	7,859'20
	Syampur	12'84	8,217'00
	Dayanpur	11'97	7,660'80
	Dingal	12'63	8,083'20
Sabong	Kharjara	10'00	6,414'66
	Nayapara	9'7	6,208'00
	Baura	11'04	7,637'16
	Dasagram	7'05	4,846'75
	Adasimla	10'5	6,734'91
	Ghanlkuri	9'03	5,961'19
	Kapasda	8'00	5,137'33
	Sabong	9'05	5,031'04
	Malpai	9'01	5,837'39
	Bhemva	8'09	5,687'41
	Mehar	8'09	5,667'56
	Boral	6'04	4,146'79
Pingla	Bishnupur	11'02	7,185'67
	Kusumda	12'08	8,140'78
	Jaurna	12'08	8,192'00
	Dhaneswarpur	5'09	3,770'71
	Korkai	9'08	6,272'03
	Miligram	9'09	6,336'00

Police station	Name of Unions	Area in sq. mile	Area in acres/correct to the nearest approx. up to the decimal point
Kharagpur	Khiroi	9'08	6,272'75
	Gobardhanpur	6'07	4,288'57
	Pindrui	8'08	5,632'00
	Jalchak	9'08	6,272'08
	Arjani	13'79	8,825'60
	Marintora	12'58	8,051'20
	Bhetia	13'18	8,435'20
	Kolaikanda	19'21	12,294'40
	Gopali	8'59	5,497'60
	Khelar	13'08	8,371'20
	Barkala	16'26	10,406'40
	Changual	12'06	7,718'40
	Sanlea	18'09	11,577'60
	Lechmanpur	16'84	10,777'60
	Chonokmakram-		
	pur	18'75	12,000'00
	Maliara	16'50	10,560'00
Kharagpur Town	Paparara	16'87	10,796'80
	Palsia	18'24	11,673'60
	Kharida	9'48	6,060'80
	Inda	8'87	5,676'80
	Markanda	15'04	9,851'14
	Makrampur	13'08	8,302'20
	Pakarsimi	9'09	6,315'86
	Narayangarh	13'09	8,724'81
	Kotai	11'09	7,095'03
	Bagrai	13'09	8,727'92
	Larma	11'09	6,986'35
	Belda	12'04	7,799'07
	Gopinathpur	11'09	7,016'38
	Nahapur	7'09	5,073'57
	Sujanpur	11'09	7,559'71
	Tatranga	12'04	7,967'19
	Bakrabad	13'08	8,351'33
Datan	Khurshi	7'88	4,108'63
	Parumda	11'09	7,614'20
	Gardala	12'04	7,629'65
	Alikasha	12'02	7,803'67
	Rararai	10'02	6,528'00
	Dantan	12'04	7,936'00
	Mohanpur	14'03	9,152'00
	Dalda	12'09	8,256'00
	Salikota	10'06	6,784'00
	Angua	12'05	8,000'00
	Chakismilopur	11'05	7,360'00
	Anikota	10'09	6,976'00
	Jannhapur	14'05	9,280'00
	Tarkagarh	11'06	7,424'00
	Sabra	9'03	5,952'00
	Sauri	7'06	4,964'00
	Purulda	9'06	6,144'00
	Naritpur	10'06	6,784'00

Police station	Name of Unions	Area in sq. mile	Area in acres/correct to the nearest approx. up to the decimal point
Mahanpur	Sathia	11'06	7,296'00
	Sialsai	10'01	6,464'00
	Mahanpur	8'06	5,501'00
	Nilda	13'08	8,351'33
	Tannya	10'04	6,656'00
Keshiary	Gritagram	13'06	8,704'00
	Khajra	14'00	8,960'00
	Satrapur	13'00	8,320'00
	Kushumpur	12'00	7,680'00
	Baghasti	12'00	7,680'00
	Lachipur	10'08	6,912'00
	Keshiary	11'03	7,232'00
	Barorah (Lalua)	15'04	9,856'00
	Anda (Gagneswar)	12'04	7,936'00
	Santipur	6'09	3,902'04
Tamluk	Kharui	6'48	6,146'25
	Khakarda	7'59	4,755'06
	Balluck	6'01	3,845'68
	Nilkantha	6'51	4,554'59
	Raghunathpur	5'42	3,472'91
	Dhalhara	6'23	4,766'31
	Pipulberia	5'58	3,576'05
	Bishabar	5'64	3,625'24
	Anantapur	8'21	4,498'26
	Serampore	8'28	5,307'04
	Padampur	7'13	4,559'68
	Uttarsonamui	5'67	2,907'83
	Mashora	11'94	7,646'89
	Gobindanagar	10'94	7,007'15
	Joserah	8'62	5,519'76
Panskura	Brineabanchalk	7'33	4,695'99
	Khanyadighi	8'43	5,399'69
	Goalnagar	8'55	5,477'73
	Kola	7'76	4,967'72
	Palsita	8'19	5,242'05
	Sidhan	8'01	5,128'70
	Panskura	12'13	7,766'09
	Ghoshpara	8'48	5,431'69
	Amdan (Maur)	11'00	7,082'22
	Chaitanpur	7'67	4,914'65
	Pratappur	7'10	4,545'11
	Bhogpore	12'50	8,003'31
	Raghunathbari	11'06	7,436'68
	Purusattampur	10'62	6,798'02
	Mayna	8'82	5,528'61
Mayna	Pramandapur	6'27	4,075'78
	Tilkheja	7'91	5,320'56
	Ramchalk	6'36	4,075'11
	Kisrona	4'08	3,075'11
	Goloknagar	6'05	4,363'88
	Bakeha	7'04	4,525'38



Police station	Name of Unions	Area in sq. mile	Area in acres/correct to the nearest approx. up to the decimal point
Mohisadal	Asaner	8'04	5,631'23
	Kamarchalk	10'40	6,667'55
	Sheoraninagal-pai	14'36	7,205'72
	Chaksimulia	9'12	5,839'37
	Payanda		
	(Bebertahat)	9'39	6,015'42
	Basudebpur	9'44	6,044'58
	Sitalpur	12'42	11,026'83
	Itamagra	10'14	6,490'62
	Mohisadal	6'95	4,452'96
	Gopalpur	10'21	6,785'54
	Natnul	8'86	6,077'54
	Kakshya	9'10	5,825'76
	Satkandu	7'58	4,851'07
Nandigram	Kalpara	10'19	6,508'84
	Osmanpur	10'88	6,967'00
	Khakda (Norghat)	9'47	6,062'07
	Nandapur	12'04	7,728'45
	Royal	9'40	6,019'21
	Vekatia	10'91	6,084'70
	Mahammedpur	11'22	7,182'58
	Nandigram	8'98	5,747'43
	Kalabari	10'61	6,794'24
	Kadambari	10'77	6,896'91
	Biralia	9'40	6,014'21
	Amdabad	10'29	6,590'12
	Gokulnagar	8'10	6,188'15
	Samshabad	9'10	5,824'99
Sutahata	Sonachara	19'81	12,681'36
	Kukrabati	7'63	4,659'29
	Marikhali	12'11	6,818'92
	Chaitanyapur	7'54	4,801'25
	Deulpota	7'61	4,871'86
	Baruttarhiingly	9'35	5,984'29
	Babeghata		
	(Kumarpar)	7'08	5,587'12
	Debhog	8'07	5,680'10
	Sutahata	7'39	4,729'14
	Ramnagar	9'33	5,974'45
	Puramchalk		
	(Dhamyaghata)	8'47	5,897'63
	Natibera	10'10	6,484'66
Contai	Dhandalibar	11'01	7,051'80
	Kamirda	13'45	8,607'45
	Kanaidighi	9'71	6,213'42
	Aorai	11'66	7,466'09
	Amtalia	12'51	8,005'83
	Marichda	7'26	4,648'01
	Louda	9'49	6,077'90
	Naipur	10'48	6,706'66
	Badalpur	7'76	4,964'73

Police station	Name of Unions	Area in sq. mile	Area in acres/correct to the nearest approx. up to the decimal point
	Ghatua	10'58	6,769'98
	Nayanpur	14'80	9,472'60
	Balabhadrapur	9'40	6,018'18
	Serampur	7'51	4,810'84
	Duarmat	9'55	6,303'30
	Contai (Rural)	3'82	2,446'70
	Darua	6'58	4,208'72
	Basantia	8'85	9,870'13
	Chalti	5'68	3,634'19
	Berumea	9'33	5,969'69
Khejuri	Dariapur	11'18	7,154'47
	Neuria	11'72	7,503'68
	Lakhi	10'62	6,797'27
	Birbandar	11'20	7,169'80
	Kamarda	6'75	4,331'93
	Sukhachak	10'91	6,987'64
	Neludbari	11'39	7,293'34
	Tanka	8'92	5,713'80
	Nilkasha	11'05	7,076'13
	Khedgree	13'39	8,569'80
Bhagawanpur	Mohammedpur	9'00	5,760'55
	Gurgram	11'45	7,357'79
	Bhagawanpur	8'89	5,691'70
	Simulia	8'32	5,325'24
	Bibhisampur	9'50	6,082'25
	Itabari	9'00	5,760'55
	Radhapur	8'82	5,645'02
	Kotebar	10'01	6,412'37
	Kajalghana	10'99	7,034'91
	Garbasi	10'93	6,999'92
Potashpur	Mukbaria	9'37	6,001'14
	Jukhia	10'09	6,462'24
	Arjangar	10'96	7,018'98
	Barej	9'88	6,328'76
	Gokulpur	11'37	7,276'91
	Naipur	10'17	6,512'18
	Khar	11'49	7,358'77
	Panchat	9'84	6,298'92
	Potashpur	9'49	6,078'73
	Gopalpur	10'14	6,489'96
Ramnagore	Amarshi	6'84	4,379'98
	Chestipur	8'96	5,736'70
	Barahat	6'95	4,448'31
	Sarojalpur	9'52	6,093'18
	Serampur	9'36	5,993'07
	Mathura	10'69	6,947'29
	Dakshinkhawda	12'54	8,026'38
	Argoal	10'55	6,757'71
	Bashia	8'43	5,398'83
	Naldia	6'63	4,179'85
	Basantapur	9'75	6,289'96

Police station	Name of Unions	Area in sq. miles	Area in acres/corrected to the nearest approx. up to the decimal point
	Padma	12'28	7,864'29
	Talgachari	15'28	9,784'79
	Madhabpur	10'10	6,464'51
	Kadsa	10'16	6,505'17
	Chotapadmapur	11'47	7,346'95
	Karanji	10'89	6,972'00
	Kaluiddi	20'22	13,142'67
Egra	Barida	11'15	7,141'86
	Egra	10'54	6,748'52
	Eranda	9'09	5,819'43
	Bathoari	11'41	7,307'89
	Tajpur	9'97	6,380'96
	Balighar	9'94	6,363'55
	Chattri	10'19	6,526'62
	Jorthan	10'45	6,694'13
	Panchreal	9'56	6,120'46
	Sahara	10'64	6,810'91
	Charitalia	10'43	6,579'20
	Jamki	10'89	6,973'73
	Paniparal	11'11	7,113'78
	Debeda	10'46	6,696'48
	Basudebpur	9'67	6,189'61
Jhargram	Radhanagar	16'99	10,870'88
	Bandgara	20'55	13,153'64
	Jhargram	19'04	12,188'42
	Sapdhara	12'01	7,688'25
	Ledabahera	15'68	10,032'96
	Mugakandri	14'17	9,069'12
	Karsughati	13'25	8,478'23
	Chubka	9'70	6,244'34
	Sardiha	10'19	6,523'16
	Chundri	10'94	7,001'59
	Asnibari	13'06	8,702'99
	Chanli	15'33	9,809'16
	Ledhasali	14'56	9,315'96
	Dudkundi	15'69	10,041'56
Jamboni	Parihati	17'04	11,182'97
	Keudisole	11'72	7,503'73
	Gidney	14'22	9,104'47
	Chilkgarh	29'72	19,026'62
	Dubra	9'73	6,232'78
	Jamboni	15'82	10,129'56
	Chichere	15'24	9,754'87
Gopiballavpur	Amarda	23'64	15,131'28
	Sashra	10'54	6,743'54
	Saria	18'09	12,096'85
	Gopiballavpur	43'73	27,985'05
	Alampur	10'45	6,881'83

Police station	Name of Unions	Area in sq. miles	Area in acres/corrected to the nearest approx. up to the decimal point
	Charchita	11'67	7,472'33
	Tapsia	12'52	8,014'68
	Kaliara	12'01	7,442'16
	Beliabera	10'74	6,874'23
	Ramchandrapur	10'54	6,747'12
	Petbindhi	13'03	8,451'04
Binpur	Binpur	13'46	8,612'80
	Singpur	10'62	6,800'20
	Adharia	9'06	5,800'21
	Dahijuri	8'85	5,664'51
	Baita	8'64	5,531'58
	Dharampur	14'66	9,381'33
	Natia	6'64	4,248'52
	Lalgarh	18'33	11,732'75
	Ramgarh	22'88	14,644'91
	Sijua	6'27	4,013'71
	Nepara	14'16	9,065'39
	Marda	12'78	8,182'12
	Kanne	21'58	13,809'68
	Ergoda	12'78	8,146'45
	Bhilaidiha	31'00	19,838'63
	Silda	10'97	7,022'50
	Belpahari	29'49	18,871'81
	Sandapara	6'30	4,030'86
	Simulpal	31'19	19,964'26
	Banspahari	57'38	36,720'89
Sankrail	Regra	12'61	8,071'54
	Dhangari	11'38	7,285'49
	Chatri	13'08	8,372'21
	Rohini	10'55	6,750'28
	Kultikri	17'62	11,275'88
	Chirkuti	14'32	9,164'45
	Pashra	27'71	17,734'99
Nayagram	Taldangra	36'84	23,575'43
	Barakhakri	25'87	16,375'46
	Malam	13'65	8,736'98
	Bara Nagui	21'13	13,522'99
	Kharikamathani	17'15	10,973'31
	Nayagram	12'64	8,089'33
	Jamirapal	8'51	5,446'73
	Borajal	9'05	5,793'19
	Baligeria	17'04	11,137'96
	Ara	19'86	12,711'12
	Chandrarekha	122'06	78,476'16
Ghatal	Sultanpur	10'05	6,769'55
	Mansuka	11'04	7,327'78
	Birsingha	11'01	7,120'82
	Mohanpur	12'09	8,275'92

Police station	Name of Unions	Area in sq. miles	Area in Acres/corrected to the nearest approx. up to the decimal point
Dashpur	Deoanchak	14'09	9,589'69
	Ajahanagar	11'02	7,227'32
	Monoharpur	7'02	4,631'83
	Ghatal Municipality	7'06	4,879'61
	Kharar	3'00	1,959'48
	Narajole	12'03	7,836'04
	Rajnagar	10'06	6,779'30
	Sarbirai	10'04	6,677'97
	Rabidaspur	10'02	6,499'81
	Gaura	11'02	7,178'52
	Guchhati	10'01	6,528'05
	Basudebpur	10'08	6,920'16
Chandrakona	Daspur	10'01	6,444'42
	Khanjapur	10'02	6,552'46
	Chainpot	11'08	7,556'27
	Nishchintapur	10'02	6,550'09
	Jote-Ghanashyam	10'00	6,399'63
	Lakshipur	14'06	9,372'28
	Bhagabatipur	16'06	10,629'43
	Basanchhara	15'00	9,609'99
	Jara	13'08	8,879'23
	Mongral	14'03	9,204'22
	Manikdanga	14'03	9,184'70
	Kuyapur	14'00	8,971'21
	Bandipur	14'07	9,459'39
	Monoharpur	15'07	10,051'62
	Chandrakona Municipality	5'06	3,639'39
	Khirpai Municipality	6'02	3,997'48
	Ramjibanpur Municipality	6'00	3,815'82

APPENDIX—V  
( Chapter—III )  
Area Under Principal Crops Including Fruits (Period 1954-55 to 1961-62)  
( Area in 1,000 acres )

Crops	1954-55	1955-	1956-57	1957-58	1958-59	1959-60	1960-61	1961-62
Wheat	1'3	2'9	0'5	1'2	2'0	3'8	3'0	3'2
Gram	8'6	8'8	7'0	8'0	2'5	6'0	3'2	2'4
Pulses (kharif)	5'0	7'5	5'6	6'1	1'7	1'8	2'1	2'4
Sugarcane	2'3	2'3	2'4	4'0	2'6	4'4	4'6	3'0
Rape & mustard	8'6	10'2	7'0	5'0	4'0	4'4	1'7	1'7
Summer Til	2'3	2'6	2'1	2'5	1'4	1'4	1'5	1'7
Jute	27'5	32'6	27'5	34'0	36'9	18'5	23'8	30'7
Cashewnut	26'0	26'0	24'0	22'0	28'0	32'0	36'0	44'0
Fruits	17'5	18'2	18'8	18'0	22'3	23'0	25'0	25'0
Aus paddy	92'8	127'1	124'7	130'0	103'4	125'2	138'4	122'7
Aman paddy	188'8	194'5	192'0	186'2	163'0	179'0	189'0	189'4
Boro paddy	6'9	4'9	5'0	7'0	7'0	29'7	21'9	22'3
Pulses (rabi)	184'1	148'1	152'3	153'01	137'7	137'2	147'4	149'0
Potato	9'4	15'3	12'5	13'0	17'3	13'3	13'4	13'3
Betel-leaves	2'5	2'5	2'6	2'8	2'8	2'9	2'9	3'0
Groundnut	0'91	0'50	0'50	0'50	0'50	0'51	0'93	90'93

# APPENDIX—VI

## ( Chapter—III )

Average Yield Per Acre ( In Mds. )

Crops	1954-55	1955-56	1956-57	1957-58	1958-59	1959-60	1960-61	1961-62
Aus paddy	4.37	7.27	6.69	7.00	6.07	5.50	10.50	10.0
Aman paddy	7.77	10.52	12.48	13.00	5.17	10.50	14.00	14.00
Boro paddy	5.00	5.00	15.47	15.00	10.3	10.0	9.50	9.75
Potato	84.00	52.55	56.65	96.00	55.88	140.00	145.00	122.00
Wheat	7.85	5.58	3.82	4.0	5.0	5.50	5.0	10.00
Jute	3.58	3.06	1.76	2.0	2.05	2.05	2.05	2.08 ( bales )
Pulses (kharif)	6.0	7.1	6.23	7.5	7.1	6.25	7.5	6.0
Pulses (rabi)	6.0	5.51	7.1	7.0	5.50	6.0	7.0	7.5
Gram	5.01	6.85	4.3	5.1	8.0	6.50	7.5	5.0
Rape & mustard	3.84	5.27	1.87	3.0	2.85	4.0	5.50	6.0
Summer Til	4.75	4.32	4.25	5.1	3.30	4.7	5.0	4.50
Sugarcane	325.58	587.53	505.26	520.1	510.42	500.0	525.0	500.0
Cashewnut	13.0	13.0	14.0	15.0	24.0	26.0	26.0	30.0
Betel-leaves	2028	2213	2300	2300	2500	2500	2300	2000 (in thousand number)
Groundnut	16.0	17.0	15.0	14.0	13.0	13.15	12.0	45.0

# APPENDIX—VII

## ( Chapter—III )

Average Production of the Principal Crops Including Fruits (Period from 1954-55 to 1961-62) in Thousand Tons.

Crops	1954-55	1955-56	1956-57	1957-58	1958-59	1959-60	1960-61	1961-62	Remarks
Aus paddy	14.5	33.5	30.6	31.1	23.2	44.1	53.8	45.4	
Aman paddy	538.3	780.5	888.3	720.1	556.4	698.4	582.6	982.3	
Boro paddy	2.3	3.6	2.8	2.7	2.8	11.0	7.7	7.2	
Potato	25.0	25.8	35.8	38.0	61.1	69.0	72.0	60.1	
Wheat	0.4	0.6	0.1	0.2	0.05	0.03	1.0	1.2	
Jute (in bales)	111.0	99.8	45.1	75.2	82.2	55.5	71.4	52.1	( in bales )
Pulses (kharif)	1.1	1.6	1.3	1.7	0.04	0.4	0.5	0.05	
Pulses (Rabi)	40.5	37.5	35.5	29.7	25.05	30.7	38.2	41.4	
Rape & mustard	1.3	2.0	0.5	1.0	0.5	0.6	0.3	0.4	
Gram	2.5	2.2	1.1	2.1	0.07	1.6	0.8	0.8	
Summer Til	0.4	0.4	0.3	0.4	0.02	0.2	0.3	0.3	
Sugarcane	27.5	49.6	44.9	45.1	45.2	81.5	85.4	55.0	
Cashewnut	1.0	1.0	0.05	0.05	48.07	89.61	104.13	121.40	
Betel-leaves	5070	5530	5800	6440	7000	7250	6676	6000	(in thousand number)
Groundnut	1.5	1.5	1.4	1.3	1.2	1.2	1.1	4.6	



## APPENDIX—VIII

( Vide Chapter—V )

Distribution of the Consumer's Rupee, A Complete Price Spread of a few  
Major Commodities of the District :

In 1961

### ( Paddy & Rice )

Producers' price per $1\frac{1}{2}$ mds. of paddy @ Rs. 12/= per md.	Rs.	18'00
Market charges paid by seller at assembling centre	,,	0'12
Storage Loss	,,	0'66
Handling and transport charges to Rice Mills	,,	0'25
Processing cost	,,	0'50
Miller's Profit	,,	2'00
Wholesaler's price of rice (One Md)	,,	21'53
Handling, transport etc. including wholesalers	,,	1'37
Retailers' cost with margin	,,	2'10
Price paid by Consumers	,,	25'00

Producers' share in consumers' Rupee is : 18:25 i.e. 72%

### Potato ( Nainital )

Producers' net selling price in the farm	per md.	Rs.	9'00
Cost of transport to Assembling Market	,,	,,	0'37
Market charges, like coolie, sewing, loading, sutting in string, packing etc.	,,	,,	0'13
Shortage in transport from Farm to Assemble market @ 2 srs. in the md.	,,	,,	0'50
Profit earned by Faria	,,	,,	0'50
Cost of assortment, loading, unloading etc. in Assembling market.	,,	,,	0'50
Cost of carrying to Rly. Station and Miscellaneous expenses at the Rly. Stn,	,,	,,	0'50
Rly. freight from Garbeta to Calcutta and collie, cartage etc. from Howrah (Calcutta) Rly. station to Posta or (terminal market at Calcutta)	,,	,,	0'50
Wholesalers' profit	,,	,,	2'00
Commission at Calcutta	,,	,,	0'50
Retailers' Expenses.	,,	,,	0'25
Shortage during transit @ 2 srs. per md. by rail.	,,	,,	0'50
Retailers' margin.	,,	,,	0'75
Consumers' price.	,,	,,	18'00

Producers' share in consumers' Rupee 9 : 18 i.e. 50%

### Pulses (Whole)

Producers' price of Mung (whole) in a village of Jhargram	Rs.	20'00
Market charges paid by buyer at assembling centres	,,	0'12
Transport charge from village to assembling centres	,,	0'25
Storage charges including losses	,,	0'63

Market charges at assembling centre for eliminating refractions, coolie, sewing packing etc.	...	„	1'00
Cost of carrying from assembling centre to terminal market at Calcutta, cartage, Rly. freight etc.	...	„	1'00
Loading, unloading cartage etc. and other market charges in Calcutta (wholesale) market	...	„	1'50
Wholesalers' profit	...	„	0'50
Retailers' expenses including shortage during transit & retailers' margin	...	„	1'50
Consumers' price	...	„	26'50

Producers' share in consumers' rupee in 20 : 26½ i.e. 75%

### Betel-leaves

		Per basket of 10,000 leaves.
Growers' farm price	...	Rs. 69'00
Transport cost from Farm to Market	...	„ 1'06
Brokers' commission.	...	„ 0'62
Merchants' purchase price	...	„ 70'68
Re-assortment cost including Katai & Paltai	...	„ 0'69
Repacking & Rebundling cost with materials	...	„ 1'50
Charges for Hospitable purpose	...	„ 1'50
Iswarbritti	...	„ 0'06
Transport cost from Tamluk to Panskura	...	„ 0'50
Labour ( incidental ) charges	...	„ 0'25
Rent at Posta	...	„ 0'03
Rly. Freight from Panskura to Howrah	...	„ 10'03
Merchants' profit	...	„ 4'00
Merchants' selling price	...	„ 87'80

Producers' share in consumers' price is Rs. 87'69 i.e. 80%

### Cashewnut (Kernel)

Cost of whole nut (pod) of 4 mds. @ Rs. 16'00 per md. required to process one md. of kernel	...	Rs. 64'00
Transport cost from Farm to Market including market charges	...	„ 1'50
Processing cost	...	„ 9'00
Miscellaneous expenditure at processing centre	...	„ 2'50
Producers' margin of profit after processing	...	„ 50'00
Selling price of the producers' to local dealers	...	„ 81'00
Local dealers' cost of storage	...	„ 0'25
Driage	...	„ 2'00
Profit	...	„ 9'75
Selling price of the dealers	...	„ 93'00
Cost of carrying to consuming market	...	„ 1'00
Cost of packaging dehydrated etc.	...	„ 0'50
Cost of wholesalers' margin at consuming market	...	„ 1'00
Cost of commission etc. as retailer's cost	...	„ 1'00
Retailers' profit	...	„ 1'00
Consumers' price	...	Rs. 98'00

Producers' share of consumers' price is Rs. 98 : 64 or 65'3%

**APPENDIX—IX**  
( Vide Chapter—V )  
**LIST OF MARKETS**

**List of 'A' Class Market**

Name of Market/ Hat.	Sitting Days.	Sitting Time.	Average assemblage.	Important agril. produce and annual volume of transaction.
Ghatal Market-cum-Hat.	Daily & Monday & Friday	7-30 a.m. to 7-00 p.m	1,75,000	Paddy — 1,00,000 Mds. Rice — 30,000 „ Potato — 25,000 „ Jute — 20,000 „
Dudkumra Hat.	Wednesday & Sunday	8-00 a.m. to 4-00 p.m.	50,000	Jute — 2,50,000 „ Potato — 1,50,000 „ Khesari — 50,000 „
Kharagpur Rly. Market.	Daily (Hat on Sunday)	7-00 a.m. to 8-00 p.m.	10,000	Rice, Pulses, Potato, Onion, Fruits, Fish, Eggs, Poultry, Meat.
Contai Bazar.	Daily (Hat on Sunday & Thursday)	—do—	3,000	Paddy, Rice, Jute, Vegetables, Pulses, Potato, & Onions.

**List of 'B' Class Markets**

Jhargram Market.	Daily	6-00 a.m. to 11-00 a.m.	1,000	Rice, Vegetables. Rice — 50,000 Mds. Vegetables 50,000 „
Binpur Market.	Monday	11-00 a.m.	3,000	Rice — 5,000 „ Paddy — 50,000 „ Egg — 30,000 Nos. Fowl — 40,000 „
Lankagarh Hat.	Wednesday & Sunday	8-00 a.m. to 4-00 p.m.	55,000	Vegetables 50,000 Mds. Fruits — 500 „
Chachua Hat.	Tuesday & Saturday	9-00 a.m. to 3-00 p.m.	65,000	Jute — 50,000 „ Vegetables 20,000 „
Sonakhali Hat.	Thursday & Sunday	—do—	50,000	Rice — 15,000 „ Vegetables 30,000 „

Name of Market/ Hat.	Sitting Days.	Sitting Time.	Average assemblage.	Important agril. produce and annual volume of transaction.	
Kotwali Bazar.	Daily	7-00 a.m. to 12 Noon	300	Poultry —	4,000 Nos.
				Potato —	4,000 Mds.
				Vegetables	5,000 "
				Fish —	800 "
				Meat —	1,500 "
				Eggs —	18,000 Nos.
Mia Bazar	—do—	—do—	300	Poultry —	1,000 Nos.
				Potato —	4,000 Mds.
				Vegetables	2,000 "
				Fish —	100 "
				Meat —	1,000 "
				Eggs —	5,000 Nos.
School Bazar	—do—	—do—	400	Poultry —	2,500 "
				Potato —	4,500 Mds.
				Vegetables	7,000 "
				Fish —	1,000 "
				Meat —	1,800 "
				Eggs —	20,000 Nos.
Raja Bazar	—do—	—do—	200	Potato —	1,000 Mds.
				Vegetables	4,000 "
				Fish —	600 "
				Meat —	1,000 "
				Eggs —	10,000 Nos.
Station Bazar	—do—	—do—	100	Poultry —	500 "
				Potato —	1,000 Mds.
				Vegetables	3,000 "
				Fish —	100 "
				Meat —	700 "
				Eggs —	1,500 Nos.
Ballichak Hat.	Monday & Friday	7 a. m. to 4 p. m.	4,000	Paddystraw	3,00,000 Mds.
				Poultry —	5,000 "
				Khesari —	3,000 "
				Paddy —	3,00,000 "
				Rice —	40,000 "
				Pototo —	3,000 "
				Vegetables	50,000 "
				Fish —	2,000 "
				Meat —	1,500 "
				Eggs —	20,000 Nos.
Garbeta Hat	—do—	—do—	1,500	Poultry —	2,000 "
				Potato —	7,000 Mds.
				Vegetables	30,000 "
				Fish —	1,500 "
				Meat —	600 "
				Eggs —	1,500 Nos.

Name of Market/ Hat.	Sitting Days.	Sitting Time.	Average assemblage.	Important agril. produce and annual volume of transaction.
Amlagora Market	Thursday & Sunday	7 a. m. to 4 p. m.	4,000	Sweet-Pumpkin — 15,000 Mds. Firtwood— 2,00,000 „ Gur — 2,000 „ Paddy 12,00,000 „ Rice — 8,00,000 „ Potato — 2,00,000 „ Vegetables 5,000 „ Fish — 1,500 „ Eggs — 1,000 Nos.
C. K. Road	—do—	—do—	2,500	Poultry — 3,000 „ Potato — 10,000 mds. Vegetables 3,000 „ Fish — 1,000 „ Meat — 300 „ Eggs — 15,000 Nos.
Salboni Market	Wednesday & Sunday	—do—	3,500	Poultry — 2,000 „ Patato — 7,000 Mds. Vegetables 2,000 „ Fish — 1,000 „ Meat — 200 „ Eggs — 12,000 Nos
Satmile Hat.	Wednesday & Saturday	8 a. m. to 8 p. m.	500 to 600	Rice, Paddy, Jute, Sun-hemp, Potato, Vegetables, Mustard Oil, Green, Coconut —1,00,000 Mds.
Tengra Hat	Thursday & Sunday	—do—	2,250 to 3,000	Rice, Pulses, Veg. Cattle, Poultry etc. 1,00,000 Mds.
Geonkhali Hat	Monday & Friday	—do—	4,000 to 6,000	Jute, Rice, Paddy, Potato, Pulses. Veg. 3,10,000 Mds.
Teropakia	Wednesday & Saturday	—do—	1 500 to 2,500	Rice, Paddy, Jute, Gur Pulses, Straw and Veg. etc. —2,50,000 Mds.
Kalinagar Hat	Tuesday & Friday	—do—	800 to 1,000	Rice, Paddy, Potato, Jute, & Fish —50,000 Mds.
Keshiary Hat	Sunday & Thursday	—do—	1,000 to 1,500	Vegetables, Canegur, Babui-rope 1,25,000 Mds.
Samsonka Hat	Friday	8 a. m. to 8 p. m.	2,500 to 3,000	Betel-leaves
Belda Market	Daily	7 a. m. to 6 p. m.	300 to 500	Paddy, Rice, Coconut, Vegetables 10,00,000 Mds.
Baita Bazar	Monday & Friday	8 a. m. to 7 p. m.	1,800 to 2,000	Rice, Betel-Leaves, — 25,000 Mds.
Mahisadal Market	Daily	7 a. m. to 7 p. m.	1,000	Rice, Veg., Fruits.

Name of Market/ Hat.	Sitting Days.	Sitting Time.	Average assemblage.	Important agril. produce and annual volume of transaction.
Tamluk Municipality Market	—do—	—do—	1,200	Rice, Veg., Fish, Betel-leaves. — 11,10,000 Mds
Kukrahati Hat	Thursday	—do—	1,000 to 1,500	Rice and Paddy — 15,00,000 „
Sutahata Market	Sunday & Wednesday	—do—	1,000 to 1,500	Rice, Vegetables, — 1,80,000 „
Panskura Hat	Sunday & Wednesday	—do—	1,500 to 2,000	Rice & Veg. 1,50,000 „
Kola Nutan Bazar (Kolaghat)	Monday & Friday	—do—	1,000 to 1,500	Jute, Vegetables, Fish — 10,50,000 „
Bhimeswari Hat	Sunday & Thursday	—do—	2,000	Green Vegetables, Jute, Rice — 35,000 „
Kahalgarh Hat	Thursday & Friday	—do—	500	—do— 15,000 „
Bhagawanpur Hat	Monday & Friday	—do—	1,000	Green Vegetables, Rice, Betel-leaves 30,000 „
Mirgoda Hat	Wednesday & Saturday	—do—	1,200	Paddy, Betel-leaves — 50,000 „
Egra Hat	—do—	—do—	1,500	Green Vegetables, Rice, Betel-leaves— 50,000 „
Dubda Hat	Monday & Friday	—do—	1,000	—do— — 20,000 „
Basudevpur Hat	Monday & Thursday	—do—	900	—do— — 20,000 „
Beta Hat	Wednesday & Saturday	—do—	700	Green Vegetables, Rice, Betel-leaves— 20,000 „
Panchet Hat	Monday & Friday	—do—	600	—do— — 20,000 „
Potashpur	Wednesday & Saturday	—do—	800	—do— — 20,000 „
Manglamaro Hat	Thursday & Friday	7 a. m. to 7 p. m.	2,000	Green Vegetable, Rice, Paddy & Betel-leaves. — 75,000 Mds

## List of 'C' Class Markets/Hats :

			Dry	rainy	
Rly. New Market (Kgp.)	Daily	7 p.m. to 8 p.m.	2000	—	Vegetables, Fish, Meat Egg, Poultry. „

Name of Market/ Hat.	Days of Sitting.	Sitting Time.	Average assemblage.		Important agril. produce and annual volume of transaction.
			<i>Dry</i>	<i>rainy</i>	
Puratan Bazar (Kgp.)	—do—	—do—	2000	—	Rice, Vegetables, Fish, Meat.
Kharida Market	—do—	—do—	1500	—	—do—
Pirbaba Bazar	—do—	—do—	400	—	Vegetables, Fish.
Sonamukhi Hat	Wednesday & Saturday	9 a.m. to 6 p.m.	1500	—	Rice, Vegetables.
Sakua Hat	Monday	—do—	1000	—	—do—
Benapur Hat	Tuesday	—do—	1000	—	—do—
Mukshedopur Hat		—do—	—do—	—	—do—
Madpur Hat	Sunday & Thursday	—do—	1000	—	—do—
Malancha Hat	Daily	7 a.m. to 8 p.m.	100	100	Rice, Vegetables, Fish, Meat.
Barendra Market	—do—	—do—	200	100	—do—
Narayan-garh Hat	Thursday	9 a.m. to 8 p.m.	2000	1500	Vegetables, Fish, Meat.
Khakurda Hat	Sunday	—do—	5000	4000	Vegetables, Fish, Gur, Rope.
Kotaigarh Hat	Monday & Friday	—do—	2000	1500	Vegetables, Rice, Fish.
Redipur Hat	Wednesday	—do—	300	200	Rice, Vegetables.
Kushbagan Hat	Monday	—do—	800	500	Rice, Vegetables, Meat.
Bankri-bazar	Tuesday & Saturday	—do—	500	100	—do—
Khirai Hat	Monday & Thursday	—do—	200	100	Vegetables, Fish.
Ranisarai Hat	Thursday	—do—	300	200	—do—
Temrai Hat	Thursday	—do—	400	300	Rice, Vegetables.
Sarabazar Hat	Daily	7 a.m. to 8 p.m.	200	150	Rice, Vegetables, Fish.

Name of Market/ Hat.	days of Sitting.	Sitting Time.	Average assemblage.		Important agril. produce and annual volume of transaction.
			<i>Dry</i>	<i>rainy</i>	
Monoharpur Sunday Hat		—do—	150	100	—do—
Keshrambha Wednesday Hat		9 a.m. to 8 p.m.	400	300	—do—
Uttarbab Hat	Monday	9 a.m. to 8 p.m.	500	400	Rice, Vegetables, Fish.
Sonakunia Hat	Thursday	—do—	500	400	—do—
Anikola Hat	—do—	—do—	2000	1500	—do—
Janakpur Hat	Tuesday & Saturday	—do—	400	300	—do—
Turka Hat	—do—	—do—	500	400	—do—
Sabra Hat	Thursday	—do—	150	100	—do—
Paharichak Hat	Monday & Friday	—do—	400	300	—do—
Jhalda Hat	Wednesday Saturday	—do—	900	700	—do—
Janabar Hat	Monday	—do—	600	500	—do—
Mankapur Hat	Wednesday & Monday	—do—	2000	1500	—do—
Dhaneswar- pur Hat	Sunday	—do—	1000	600	Cattle, Buffalo, Sheep Goat.
Mohanpur Hat	Sunday & Thursday	—do—	2000	1500	Betal-leaves, Rice, Vegetables.
Nalda Hat	Monday & Friday	—do—	300	200	Rice, Vegetables, Fish.
Amarda Hat	Monday	—do—	200	150	—do—
Khejuri Hat	Wednesday	—do—	2000	1600	Rice, Vegetables.
Santrapur Hat	Friday	—do—	100	50	Rice, Vegetables.
Babuigeria Hat	Saturday	—do—	1500	1200	Rice & Canegur.



Name of Market/ Hat.	Days of Sitting.	Sitting Time.	Average assemblage.		Important agril, produce and annual volume of transaction.
Joykrishna- pur	Faiday	—do—	<i>Dry</i> 200	<i>rainy</i> 150	Rice, Vegetables.
Belki Hat	Saturday	—do—	1000	200	Potato, Vegetables, Mat.
Malpur Hat	Monday	—do—	400	200	Vegetables, Fish.
Dasogram Hat	Sunday	—do—	4000	2000	Rice, Vegetables, Fish.
Nedhua Hat	Wednesday	—do—	1500	1000	Rice, Vegetables.
Bhanjapur Hat	Wednesday	—do—	1000	800	Rice, Vegetables, Fish, Mat.
Benia Hat	Saturday	—do—	300	200	—do—
Sabong Hat	Tuesday	—do—	3000	2000	Rice, Potato, Fish, Jute, Mat.
Porua Hat	Saturday & Wednesday	—do—	500	300	Rice, Vegetables.
Belpai Hat	Thursday	—do—	400	300	—do—
Khagrageria Hat	Monday	—do—	600	400	—do—
Mohar Hat	—do—	—do—	400	300	—do—
Syamsundar- pur Hat	Sunday & Thursday	—do—	3000	2500	Rice, Veg., Fish, Mat.
Bural Hat	Thursday	—do—	400	300	—do—
Bishnupur Hat	Friday	—do—	800	600	Rice, Fish, Vegetables.
Kamar- pota Hat	Monday & Thursday	—do—	300	200	—do—
Ranichak Hat	Monday & Friday	—do—	2000	1500	—do—
Sahara Hat	Sunday	—do—	300	200	Rice, Vegetables.
Gopinathpur Hat	Wednesday	—do—	200	100	—do—
Pingla Hat	Saturday & Tuesday	—do—	400	300	—do—

Name of Market/ Hat.	Days of Sitting.	Sitting Time.	Average assemblage.		Important agril. produce and annual volume of transaction.
Dhaneswarpur Hat	Wednesday	—do—	<i>Dry</i> 300	<i>rainy</i> 100	—do—
Karkai Hat	Sunday	—do—	500	300	—do—
Maligram Hat	Sunday & Wednesday	—do—	1000	800	—do—
Canjet Hat	Monday & Thursday	—do—	200	100	—do—
Khirai Hat	Thursday & Saturday	—do—	300	200	—do—
Gobardhanpur Hat	Sunday & Thursday	—do—	1000	600	—do—
Kunjapur Hat	Tuesday & Saturday	—do—	800	600	—do—
Kalukhare Hat	Monday & Friday	—do—	1500	1200	—do—
Pinduri Hat	Sunday & Wednesday	—do—	2000	1400	—do—
Baricha Hat	Monday & Friday	—do—	2000	1500	—do—
Nateswari Hat	Sunday	—do—	600	400	Rice, Vegetables.
Tileswari Hat	Tuesday	—do—	300	200	—do—
Baborta Hat	Tuesday & Saturday	—do—	400	200	Rice, Vegetables, Fish.
Nadakumar Hat	Monday & Friday	—do—	200	100	—do—
Amtitbari Hat	Sunday & Thursday	—do—	100	50	—do—
Nikashi Hat	Tuesday & Sunday	—do—	100	60	—do—
Baichabari Hat	Sunday & Thursday	—do—	500	200	—do—
Ranipur Hat	Monday & Friday	—do—	300	100	—do—
Kanchi Hat	Tuesday & Thursday	9 a.m. to 8 p.m.	700	300	Rice, Vegetables, Fish.
Namal Lakshya Hat	Sunday & Wednesday	—do—	150	50	—do—

Name of Market/ Hat.	Days of Sitting.	Sitting Time.	Average assemblage.		Important agril. produce and annual volume of transaction.
Sitapur Hat	Tuesday & Saturday	—do—	<i>dry</i> 300	<i>rainy</i> 100	—do—
Horikali Hat	Sunday & Thursday	—do—	400	200	—do—
Kakdihi Hat	Tuesday & Saturday	—do—	400	200	Rice, Vegetables.
Darials Hat	Sunday & Wednesday	—do—	600	200	Rice, Betel-leaves.
Banpore Hat	Sunday & Thursday	—do—	600	200	Rice, Fish, Veg.
Soadighi Hat	Sunday & Wednesday	—do—	300	100	—do—
Kankatya Market	Daily	7 a.m. to 6 p.m.	300	100	—do—
Ramtarak Hat	Tuesday & Saturday	9 a.m. to 8 p.m.	6000	2000	Betel-leaves, Rice.
Balluk Hat	Tuesday & Saturday	—do—	2000	1000	—do—
Nilkanthia Hat	Sunday & Wednesday	—do—	400	200	Rice, Paddy, Fish.
Damari Hat	—do—	—do—	600	200	Rice, Vegetables.
Mathuri Hat	Monday & Friday	—do—	400	200	Vegetables, Fish.
Kalatala Hat	Sunday & Wednesday	—do—	1000	600	Vegetables, Rice.
Radhamoni Hat	—do—	—do—	4000	2000	Veg. Rice, Betel-leaves.
Doraj Hat	Monday & Thursday	—do—	400	200	—do—
Haridashpur Market	Daily	7 a.m. to 6 p.m.	600	200	—do—
Gourimani Hat	—do—	—do—	150	50	—do—
Gourmohini Hat	—do—	—do—	200	100	—do—
Gourangapur Hat	Sunday & Thursday	—do—	150	50	Vegetables, Fish.
Karpai Hat	Monday & Friday	—do—	200	100	—do—

Name of Market/ Hat.	Days of Sitting.	Sitting Time.	Average assemblage.		Important agril, produce and annual volume of transaction.
Hijalberia Hat	Sunday & Wednesday	—do—	<i>dry</i> 800	<i>rainy</i> 100	—do—
Narayanpur Hat	Daily	—do—	200	100	—do—
Gasefat Hat	Thursday & Sunday	—do—	2000	1000	Rice, Fish, Vegetables.
Kalitola Hat	Wednesday & Saturday	—do—	2000	1000	—do—
Bhandarchandi Hat	Sunday	—do—	6000	2000	—do—
Srikantha Hat	Friday	—do—	1500	700	—do—
Samra Hat	Tuesday & Saturday	—do—	4000	2000	—do—
Dora Hat	Monday & Friday	—do—	4000	2000	Rice, Fish, Veg.
Kaikana Hat	Wednesday & Saturday	—do—	300	400	—do—
Kumarganj Hat	Monday & Friday	—do—	700	300	—do—
Ismalichak Hat	Monday & Friday	—do—	1000	400	—do—
Nandigram Hat	Sunday & Thursday	—do—	1400	600	Vegetables.
Saharpur Hat	Saturday, Tuesday	—do—	400	200	—do—
Takapura Hat	Sunday, Wednesday	—do—	300	100	—do—
Narayan Hat	Saturday, Tuesday	—do—	N.A.	N.A.	—do—
Mahammad- pur Hat	Saturday, Tuesday	—do—	600	200	Veg., Paddy.
Charkhali Hat	Twice a week	—do—	200	100	Rice, Veg.
Benumeria Hat	—do—	—do—	200	100	Vegetables.
Panchkhali Hat	Sunday, Thursday	—do—	6000	5000	—do—
Raypara Hat	Sunday, Wednesday	—do—	600	600	—do—

Name of Market/ Hat.	Sitting Days.	Sitting Time.	Average assemblage.		Important agril. produce and annual volume of transaction.
Krishnagar Hat	Monday, Friday	—do—	<i>dry</i> 300	<i>rainy</i> 200	—do—
Bhatuna Hat	Sunday, Thursday	—do—	400	200	—do—
Hanschar Hat	—do—	—do—	6000	4000	—do—
Birala Hat	—do—	—do—	2000	1000	—do—
Norghat Cattle Market	Wednesday	—do—	700	300	Cattle only.
Harakhali Hat	Monday, Friday	—do—	800	400	Rice, Vegetables.
Kashipur Hat	Tuesday, Saturday	—do—	150	100	—do—
Bibir Hat	—do—	—do—	400	100	—do—
Berda Hat	Monday, Friday	—do—	400	100	—do—
Sankarpur Hat	Sunday, Wednesday	—do—	100	50	—do—
Dweraberia Hat	Monday, Friday	—do—	200	100	—do—
Benichak Hat	Tuesday, Saturday	—do—	800	400	Rice, Veg., Fruits.
Balughata Bazar	Monday, Friday	—do—	1000	400	—do—
Rajnagar Bazar	Thursday, Saturday	—do—	500	800	—do—
Kalir Hat	Tuesday, Saturday	—do—	600	400	—do—
Basudevpur Hat	Monday, Wednesday	—do—	300	200	Rice, Vegetables.
Hatiberia Hat	Sunday, Wednesday	—do—	400	200	—do—
Monochowkir Hat	Friday	—do—	400	100	Vegetables.
Sadhapota Hat	Wednesday	—do—	200	100	—do—
Tustir Hat	Saturday	7 a.m. to 6 p.m.	200	100	Vegetables, Rice.
Raghunath-bari Hat	Wednesday, Sunday	—do—	2000	1000	—do—

Name of Market/ Hat.	Sitting Days.	Sitting Time.	Average assemblage.		Important agril. produce and annual volume of transaction.
Pubasuktia Nutan Hat	Tuesday, Saturday	—do—	<i>dry</i> 200	<i>rainy</i> 100	—do—
Chipur Hat	Tuesday, Saturday	9 a.m. to 8 p.m.	200	100	—do—
Maynamini Hat	Monday, Friday	—do—	150	80	—do—
Bhogpur Hat	Monday, Friday	—do—	800	400	—do—
Janefali Hat	Sunday, Wednesday	—do—	400	100	—do—
Saraghat Hat	Tuesday, Saturday	—do—	300	200	—do—
Chamaguri Hat	Friday	—do—	800	300	—do—
Manipukur Hat	Thursday	—do—	300	200	—do—
South Chanciyara Hat	Monday, Friday	—do—	300	100	—do—
Harinarayan-chak Hat	Sunday	—do—	300	200	—do—
Ghospur Hat	Sunday, Wednesday	—do—	200	100	—do—
Hateswar Hat	Wednesday, Sunday	—do—	200	100	—do—
Siddah Hat	Monday, Thursday	—do—	400	100	—do—
Dauli Hat	Sunday, Wednesday	—do—	150	100	Vegetables.
Sagarbar Hat	Saturday	—do—	200	100	Rice, Vegetables.
Kolapirtals Hat	Saturday, Wednesday	—do—	500	200	—do—
Gopalnagar Hat	Daily	6 a.m. to 7 p.m.	1500	700	—do—
Kajichak Hat	Tuesday	8 a.m. to 8 p.m.	300	100	—do—
Kulia Hat	Thursday & Monday	—do—	300	100	—do—

Name of Market/ Hat.	Days of Sitting.	Sitting Time.	Average assemblage.		Important agril. produce and annual volume of transaction.
Mohanarpur Hat	—do—	—do—	<i>dry</i> 400	<i>rainy</i> 300	—do—
Khanaridi Hat	Friday & Monday	—do—	300	100	—do—
Kharia Hat	Wednesday	—do—	300	200	—do—
Shorda Hat	Thursday, Monday	—do—	500	200	—do—
Sajnagacha	Wednesday, Saturday	—do—	300	300	—do—
Brindaban- chak Hat	Wednesday Saturday	8 a.m. to 8 p.m.	200	50	Rice, Vegetables,
—do— II	Monday, Thursday	—do—	200	50	—do—
Batola Hat	Monday, Friday	—do—	200	50	—do—
Batullya Hat	Sunday, Thursday	—do—	300	50	—do—
Jessore Hat	Monday, Thursday	—do—	250	100	Vegetables.
Paskuria Hat	Wednesday Saturday	—do—	300	100	—do—
Keshapat Hat	Tuesday, Friday	—do—	1500	1000	Vegetables, Rice.
Monsapukur Hat	Sunday, Thursday	—do—	400	200	—do—
Mysora Hat	Sunday, Wednesday	—do—	300	100	—do—
Molar Hat	Monday, Friday	9 a.m. to 6 p.m.	400	200	Vegetables, Rice, Fish.
Gopinathpur Hat	Tuesday, Saturday	—do—	1400	600	—do—
Guigram Hat	Sunday, Wednesday	—do—	1000	600	—do—
Sayed Bazar	Monday Friday	—do—	1400	600	—do—
Kotalouri Hat	Sunday, Thursday	—do—	400	300	—do—
Illaspur Hat	Saturday, Wednesday	—do—	1000	500	—do—

Name of Market/ Hat.	Days of Sitting.	Sitting Time.	Average assemblage.		Important agril. produce and annual volume of transaction.
Sibbazar	Wednesday, Thursday	—do—	<i>dry</i> 1000	<i>rainy</i> 500	—do—
Darimara Hat	Tuesday	—do—	400	200	—do—
Itaberia Hat	Wednesday Saturday	—do—	2500	1500	—do— and Paddy, Fruits.
Basuli Hat	Sunday, Tuesday	—do—	300	100	—do—
Bazra Hat	Monday, Friday	—do—	600	400	—do—
Lalbazar	Tuesday, Friday	—do—	1000	800	—do—
Kolabaria Hat	Wednesday, Saturday	—do—	2000	1000	—do—
Chabar Hat	Monday, Tuesday	—do—	400	200	—do—
Nazir Hat	Monday, Tuesday	—do—	1200	800	—do—
Banenda Hat	Monday, Thursday	—do—	1000	800	—do—
Mugberia Hat	Sunday, Wednesday	—do—	1000	600	—do—
Katapukuria Hat	Monday, Friday	—do—	600	200	Vegetables.
Jukhi Hat	Sunday, Wednesday	—do—	600	200	—do—
Sardullachak Hat	Saturday, Tuesday	—do—	600	200	—do—
Barjora Hat	Monday, Friday	9 a.m. to 6 pm.	400	200	Vegetables.
Utbdal Hat	Tuesday, Friday	—do—	800	400	—do—
Mahammad- pur Hat	Monday, Friday	—do—	700	300	—do—
Dauli Hat	Monday, Friday	—do—	400	200	—do—
Patna Hat	Sunday, Thursday	—do—	800	400	—do—
Balisai Hat	Daily	—do—	800	500	—do—



Name of Market/ Hat.	Days of Sitting.	Sitting Time.	Average assemblage.		Important agril. produce and annual volume of transaction.
Banihara Hat	Monday, Friday	—do—	<i>dry</i> 1000	<i>rainy</i> 600	—do—
Sonamari Hat	Tuesday, Saturday	—do—	1200	600	—do—
Baramile Hat	Thursday, Saturday	—do—	800	200	—do—
Sadi Hat	—do—	—do—	1200	600	—do—
Thikra Hat	Tuesday, Saturday	—do—	800	200	—do—
Kalindi Hat	—do—	—do—	600	200	—do—
Kutpul Hat	—do—	—do—	400	200	—do—
Birajbazar	Tuesday	8 a.m. to 8 p.m.	500	300	—do—
Shibbazar Hat	Daily	6 a.m. to 7 p.m.	500	300	—do—
Dakhindauki Hat	Monday, Friday	8 a.m. to 8 p.m.	500	300	—do—
Sitala Hat	Wednesday, Saturday	—do—	600	400	—do—
Dholemari Hat	Monday, Friday	—do—	800	400	—do—
Mirjapur Hat	Sunday, Wednesday	—do—	1000	600	—do—
Mukundapur Hat	Thurs. Tues, Saturday	—do—	1200	600	—do—
Fichabani Hat	Sunday, Thursday	—do—	1000	650	—do—
Chatradhar-pur Hat	Tuesday, Saturday	—do—	1000	600	—do—
Karpora Hat	Monday, Friday	—do—	800	400	—do—
Chintarani Hat	Tuesday, Saturday	—do—	800	600	—do—
Amtali Hat	Sunday, Thursday	—do—	1000	600	—do—
Dehimukundapur Hat	Thursday	—do—	800	400	—do—
Deulbar Hat	Tuesday, Saturday	—do—	500	300	—do—

Name of Market/ Hat.	Days of Sitting	Sitting Time.	Average assemblage.		Important agril. produce and annual volume of transaction.
Naga Hat	Wednesday, Saturday	—do—	<i>dry</i> 500	<i>rainy</i> 300	—do—
Morishda Hat	Wednesday, 8 a.m. to Saturday 8 p.m.		600	300	Vegetables.
Durmuth Hat	Monday, Friday	—do—	500	300	—do—
Nilpur Hat	Tuesday, Friday	—do—	500	300	—do—
Kalibari Hat	Monday, Friday	—do—	800	400	—do—
Nachinda Hat	Wednesday. Saturday	—do—	900	500	—do—
Dhangore Hat	—do—	—do—	1000	600	—do—
Belda Hat	Sunday, Thursday	—do—	500	300	—do—
Tajpore Hat	Wednesday, Saturday	—do—	900	500	—do—
Alledipur Hat	Tuesday, Saturday	—do—	500	300	—do—
Beruni Hat	Monday, Friday	—do—	600	400	—do—
Golabari Hat	Wednesday, Sunday	—do—	500	300	—do—
Birbandar Hat	Tuesday, Saturday	—do—	1000	600	—do—
Kalagachia Hat	Monday, Friday	—do—	2500	1600	—do—
Ajanbari Hat	—do—	—do—	1200	800	—do—
Henria Hat	Tuesday, Saturday	—do—	900	500	—do—
Tikashi Hat	Sunday, Wednesday	—do—	900	500	—do—
Ghatra Hat	Monday, Friday	9 a.m. to 6 p.m.	400	200	—do—
Choudhury Hat	Tuesday, Sunday.	—do—	500	300	—do—
Saharda Hat	Monday, Friday	—do—	900	500	—do—

Name of Market/ Hat.	Days of Sitting.	Sitting Time.	Average assemblage.		Important agril. produce and annual volume of transaction.
Bhatnary Hat	Sunday, Thursday	—do—	<i>dry</i> 800	<i>rainy</i> 400	—do—
Paharpur Hat	Tuesday, Saturday	—do—	900	500	—do—
Balighai Hat	Monday, Friday	—do—	500	200	—do—
Astichak Hat	—do—	—do—	1000	600	—do—
Kudi Hat	Tuesday, Saturday	—do—	500	300	—do—
Nihari Hat	Sunday, Thursday	—do—	1000	600	—do—
Telani Hat	—do—	—do—	1200	600	—do—
Panchrol Hat	Wednesday, Saturday	—do—	1200	600	—do—
Seipur Hat	Saturday, Tuesday	—do—	1000	600	—do—
Mirjapur Hat	Saturday, Wednesday	—do—	1200	600	—do—
Chorpalia Hat	Saturday, Thursday	—do—	1000	600	—do—
Paniparul Hat	Thursday, Friday	—do—	1200	600	—do—
Aranga Hat	Thursday, Saturday	—do—	900	500	—do—
Khagda Hat	Monday, Thursday	—do—	500	300	—do—
Bhawani- chak Hat	Tuesday, Saturday	—do—	800	300	—do—
Ganeswar- pur Hat	Wednesday, Saturday	—do—	500	300	—do—
Shyambari Hat	Thursday, Sunday	—do—	500	300	—do—
Satrapore Hat	—do—	—do—	800	400	—do—
Jerthan Hat	—do—	—do—	900	500	—do—
Basuli Hat	—do—	—do—	1000	600	—do—

Name of Market/ Hat.	Days of Sitting.	Sitting Time.	Average assemblage.		Important agril. produce and annual volume of transaction.
Gokulpur Hat	Saturday, Wednesday	—do—	<i>dry</i> 700	<i>rainy</i> 500	—do—
Naipur Hat	Friday, Tuesday	9 a.m. to 6 p.m.	900	500	Veg., Rice, Fish.
Amarpur Hat	Monday, Friday	—do—	1000	600	—do—
Madhupur Hat	Tuesday, Friday	—do—	500	300	—do—
Khar Hat	—do—	—do—	500	200	—do—
Kherai Hat	Sunday, Thursday	—do—	900	500	—do—
Chandanpur Hat	Tuesday, Friday	—do—	1000	800	—do—
Patharghata Hat	—do—	—do—	1200	800	—do—
Siber Hat	Monday, Thursday	—do—	900	600	—do—
Gadaibheri Hat	Wednesday, Saturday	—do—	500	300	—do—
Kamsook Hat	Sunday, Thursday	—do—	400	200	—do—
Brajasia Hat	Monday, Friday	8 a.m. to 6 p.m.	500	300	Rice, Fish, Veg.,
Kakurdanga Hat	Monday, Thursday	—do—	300	100	—do—
Setkati Hat	Monday, Friday	—do—	500	300	—do—
Tart Hat	—do—	—do—	900	500	—do—
Protapdighi Hat	—do—	—do—	1000	700	—do—
Haripur Hat	Sunday, Thursday	—do—	800	400	—do—
Kolutoal Hat	Tuesday, Friday	—do—	500	300	—do—
Mathura Hat	—do—	—do—	800	300	—do—
Brajakishorepore Hat	—do—	—do—	500	300	—do—

Name of Market/ Hat.	Sitting Days.	Sitting Time.	Average assemblage.		Important agril. produce and annual volume of transaction.
Jalda Hat	Sunday, Thursday	—do—	<i>dry</i> 500	<i>rainy</i> 300	—do—
Amarsi Hat	Sunday, Wednesday	—do—	1000	800	—do—
Chilgora Hat	Tuesday	10 a.m. to 4 p.m.	75	35	Potato, Vege., Fish, Eggs. Poultry.
Angua	Wednesday	8 a.m. to 12 noon	75	35	—do—
Sirsa	Monday, Friday	7 a.m. to 3 p.m.	50	50	—do—
Keshpur	Wednesday	12 noon to 6 p.m.	100	100	—do—
Amdubi	Sunday	—do—	1000	1000	—do—
Anandapur Bazar	Daily	7 a.m. to 12 noon	100	100	—do—
Dhalhara Hat	Monday	12 noon to 6 p.m.	150	150	—do—
Mughasan	Thursday	—do—	100	100	—do—
Pirakota	Friday	—do—	75	35	—do—
Godapiasal	Sunday	7 a.m. to 3 p.m.	200	200	—do—
Loada	Thursday, Saturday	—do—	300	100	—do—
Debra	Wednesday	3 p.m. to 6 p.m.	100	100	—do—
Marotala	Thursday	—do—	150	150	—do—
Patna	Tuesday, Saturday	8 a.m. to 2 p.m.	300	100	—do—
Malighati Hat	Wednesday, Sunday	—do—	300	100	—do—
Goalgram	Wednesday	10 a.m. to 4 p.m.	1000	500	—do—
Radhamohanpur	Tuesday, Saturday	7 a.m. to 1 p.m.	1000	500	—do—
Shyamchak	—do—	—do—	800	200	—do—
Kharkusuma	Daily	8 a.m. to 10 a.m.	75	25	—do—
Goaltore Hat	Saturday	8 a.m. to 4 p.m.	300	200	—do—

Name of Market/ Hat.	Sitting Days.	Sitting Time.	Average assemblage.		Important agril. produce and annual volume of transaction.
Amlasuli	Thursday	8 a.m. to 7 p.m.	100	100	Potato, Vegetables, Fish, Egg, Poultry.
Homegar- bazar	Daily	8 a.m. to 10 a.m.	75	25	—do—
Debcha Hat	Tuesday	8 a.m. to 1 p.m.	100	100	—do—
Panchkuri	Saturday	8 a.m. to 1 p.m.	1000	1000	—do—
Guiadaha	Tuesday	—do—	50	50	—do—
Haratala	Wednesay	—do—	50	50	—do—
Garmel	Monday	12 noon to 5 p.m.	50	50	—do—
Bhimpur	Saturday	3 p.m. to 6 p.m.	100	100	—do—
Jhargram Hat	Thursday	6 a.m. to 11 a.m.	1000	1000	Rice, Vege., Paddy.
Manikpara (Assembling Centre)	Daily	7 a.m. to 4 p.m.	50	50	Paddy, Pulse etc.
Sardiha	Friday	11 a.m to 5 p.m.	200	100	Vegetables.
Chundri	Wednesday	—do—	300	100	—do—
Parihati	Tuesday	—do—	800	200	—do—
Dahijuri	Thursday	—do—	200	100	Cattle, Vegetables.
Lalgarh	Wednesday	—do—	300	200	—do—
Ramgarh	Sunday	—do—	200	100	—do—
Silda	Firday	—do—	1000	1000	Paddy, Jute, Vege.,
Belpahari	Wednesday	—do—	300	100	Vegetables.
Kenadapara	Sunday	—do—	200	100	—do—
Raghunath- pur	Sunday	—do—	200	100	—do—
Thakurbari Hat	Sunday	—do—	400	100	Vegetables, rice
Chorobita Hat	Tuesday	—do—	1000	500	Vegetables, Cattle.
Sasrahat	Wednesday	—do—	400	100	Vegetables.
Mohipal	Thursday	—do—	300	300	—do—
Ambi Hat	Tuesday	—do—	250	150	—do—

Name of Market/ Hat.	Sitting days.	Sitting Time.	Average assemblage.		Important agril. produce and annual volume of transaction.
Nadangeria Hat	Friday	—do—	<i>dry</i> 400	<i>rainy</i> 300	Rice, Vegetables.
Pandisol	Monday	—do—	300	100	Vegetables
Kukrakhali	Saturday	—do—	300	100	Vegetables, Rice.
Kumarda Hat	Saturday	—do—	300	100	Vegetables
Rohini Hat	Friday	12 a.m. to 4 p.m.	150	150	—do—
Kultikri Hat	Monday	—do—	500	200	Vegetables, Paddy
Bonpara Hat	Sunday	—do—	200	50	Vegetables,
Khakri Hat	Tuesday	—do—	300	100	Vegetables, Rice
Nigui Hat	Sunday	—do—	150	150	Vegetables
Baligeria	Friday	—do—	700	50	Rice, Paddy, Vege.,
Nayagram Hat	Monday	12 a.m. to 4 p.m.	500	300	—do—
Paikjhari Hat	Thursday	—do—	200	100	—do—
Shamalina Hat	Thursday	—do—	300	100	Vegetables
Birkada Hat	Wednesday	—do—	400	50	—do—
Khadmarai Hat	Saturday	—do—	200	100	—do—
Old Jhargram Hat	Sunday	—do—	800	200	Vege., Fowl, Paddy, Rice.
Irpala Hat	Friday	8 a.m. to 2 p.m.	...	...	Vegetables
Khasbar Hat	Wednesday Sunday	—do—	...	...	—do—
Manoharpur Hat	Monday, Friday	—do—	...	...	—do—
Mansuka Hat	Monday, Thursday	—do—	...	...	—do—
Radhanagar Hat	Sunday, Wednesday	—do—	...	...	—do—
Maharajpur Hat	—do—	—do—	...	...	—do—

Name of Market/ Hat.	Sitting Days.	Sitting Time.	Average assemblage	Important agril. produce and annual volume of transaction.
Ghosai Hat	Saturday, Tuesday	—do—	<i>dry</i> <i>rainy</i> ...	—do—
Kharar Market	Daily	—do—	...	—do—
Sultanpur Hat	Wednesday, Saturday	—do—	...	—do—
Krishnapur Hat	Wednesday	9 a.m. to 4 p.m.	...	Cattle Market
Chandrakona Market	Daily	8 a.m. to 2 p.m.	...	Rice, Vegetables
Ramjibanpur Hat (Old)	Tuesday, Saturday	—do—	...	Betel-leaf, Vege.
Do (New)	Daily	—do—	...	Vegetables
Khirpai Hat	Monday, Wednesday, Saturday	—do—	...	Rice, Vegetables
Surhur Hat	Tuesday, Wednesday, Friday, Saturday	—do—	...	—do—
Jarpa Market	Daily	—do—	...	—do—
Jhakra Hat	Tuesday, Saturday	—do—	...	Vegetables
Monoharpur Hat	Monday, Friday	—do—	...	—do—
Joyantipur Hat	Monday, Thursday	—do—	...	—do—
Ranigunj Hat	Saturday, Thursday	—do—	...	—do—
Lahirigunj Market	Daily	—do—	...	—do—
Khakurda Hat	Tuesday Friday	—do—	...	Rice, Vegetables
Ranichak Hat	Wednesday, Tuesday	9 a.m. to 3 p.m.	...	—do—
Jotekanu- ramgarh	Tuesday Saturday	—do—	...	—do—
Chainpat Hat	—do—	—do—	...	—do—



Name of Market/ Hat.	Sitting days.	Sitting Time.	Average assemblage.		Important agril. produce and annual volume of transaction.
Ajuria Hat	Monday, Friday	—do—	<i>dry</i>	<i>rain</i>	—do—
Gopigunj Hat	Monday, Thursday	—do—	...		—do—
Joteghana-shyam Hat	Tuesday, Friday	—do—	...		—do—
Rajnagar Hat	Monday, Friday	—do—	...		—do—
Sarberia Hat	Thursday	—do—	...		—do—
Kakdari Hat	Monday, Friday	—do—	...		—do—
Joykrishna-pur	Monday, Friday	—do—	...		—do—
Basudevpur Hat	Wednesday, Saturday	—do—	...		Rice, Vegetables
Kalmijole Hat	Sunday, Thursday	—do—	...		—do—
Radhakanta-pur Hat	Monday, Friday	—do—	...		—do—
Daspur Hat	—do—	—do—	...		—do—
Sagarpur Hat	Tuesday, Friday	—do—	...		—do—
Harirampur Hat	Tuesday, Sunday	—do—	...		—do—
Nahin Manna Hat	Thursday, Sunday	9 a.m. to 3 p.m.	...		—do—
Nimtala Bazar	Daily	8 a.m. to 2 p.m.	...		—do—
Kamalpur Hat	Monday Friday	9 a.m. to 2 p.m.	...		—do—
Kheput Hat	Monday, Thursday	—do—	...		—do—
Narajole Market	Daily	—do—	...		—do—

## APPENDIX—X

(Vide Chapter—IV)

### List of Rice Mills.

Name of the Rice Mill.	Address :
1. M/S Sri Madhab Rice Mill.	Tantigaria, P.O. & Dt. Midnapur.
2. „ Sreedhar Rice Mill.	Amlagora, P.O. Garbeta, Midnapur.
3. „ Bajrang.	P.O. Salbani, Dt. Midnapur.
4. „ Radhanath Rice Mill.	—do—
5. „ Sree Sankar Rice Mill.	Chaktarini, Salboni, Midnapur.
6. „ —do—	Rangamati. P.O. Kotwali, Midnapur.
7. „ Mahalakshmi Rice Mill,	Balichak, Midnapur.
8. „ Ganga Rice Mill.	—do—
9. „ Harimati Rice Mill.	Debra, Midnapur.
10. „ Mahabir Rice Mill.	Tantigaria, Midnapur.
11. „ Mahalakshmi Rice Mill.	Amlagora, Midnapur.
12. „ Satya Narayan Rice Mill.	Tantigaria, Midnapur.
13. „ Sreekrishna Rice Mill.	Salboni, Midnapur.
14. „ Sree Gopal Rice Mill.	Tantigaria, Midnapur.
15. „ Bharat Rice Mill.	C. K. Rd. Midnapur.
16. „ Priya Nath Rice Mill.	Shyamchak, Midnapur.
17. „ Binapani Rice Mill.	Amlagora, Midnapur.
18. „ Sree Durga Rice Mill.	C. K. Rd., Midnapur.
19. „ Sri Lakshmi Rice Mill.	Amlagora, Midnapur.
20. „ Kamala Rice Mill.	Tantigaria, Midnapur.
21. „ Annapurna Rice Mill	Balichak, Midnapur.
22. „ Harihar Rice Mill.	—do—
23. „ Sreekrishna Rice Mill.	Tantigaria, Midnapur,
24. „ Trading Rice Mill.	Balichak, Midnapur.
25. „ Giri Bala Rice Mill.	—do—
26. „ Siva Durga Rice Mill.	—do—
27. „ Harekrishna Rice Mill.	—do—
28. „ Sree Guru Rice Mill.	Satbankura. Midnapur.
29. „ M/S Vijoy Sree Rice Mill.	C. K. Rd., Dist. Midnapur.
30. „ Radhasyam Rice Mill.	Shyamchak, Midnapur.
31. „ Lakshmi Narayan Rice Mill.	Balichak, Midnapur.
32. „ Ram Rice Mill.	Tantigaria, Midnapur.
33. „ Sashi Rice Mill.	Balichak, Midnapur.
34. „ Bharat Lakshmi Rice Mill.	Radhamohanpur, Midnapur.
35. „ Sree Durga Rice Mill.	—do—
36. „ Kamala Rice Mill.	Roulce, Amlagora, Midnapur.

Name of the Rice Mill.	Address :
37. „ Palli Lakshmi Rice Mill.	Radhamohanpur, Midnapur.
38. „ Haraparbati Rice Mill.	C. K. Rd., Midnapur.
39. „ Kamala Rice Mill.	Balichak, Midnapur.
40. „ Bejoy Rice Mill.	Salboni, Midnapur.
41. „ Rajpurwalla Rice Mill.	Tilakhula, Salbani, Midnapur.
42. „ Bhagya Lakshmi Rice Mill.	C. K. Rd., Midnapur.
43. „ Lakshmi Janardhan Rice Mill.	Manikpara, Midnapur.
44. „ Bhagya Lakshmi Rice Mill.	—do—
45. „ Bharat Lakshmi Rice Mill.	—do—
46. „ Sri Kamala Rice Mill.	Jhargram, Midnapur.
47. „ Sri Sibsakti Rice Mill,	—do—
48. „ Danipur Rice Mill.	Danipur, Midnapur.
49. „ Banka Rice Mill.	Mahisada, Kamalpur, Midnapur.
50. „ Sri Lakshmi Rice Mill.	Itamagra, Hajrikhali, Midnapur.
51. „ Balughata Rice Mill.	Balughata, Midnapur.
52. „ Kukrahati Rice Mill.	Kukrahati, Midnapur.
53. „ Tamluk Rice Mill.	Tamluk, Midnapur.
54. „ Durgarani Rice Mill.	Panskura, Midnapur.
55. „ Rajlakshmi Rice Mill.	Kolaghat, Midnapur.
56. „ Sitala Rice Mill.	Kolaghat, Midnapur.
57. „ Bera Rice Mill.	—do—
58. „ Annapurna Rice Mill.	—do—
59. „ Rupnarayan Rice Mill,	Kolaghat, Midnapur.
60. „ Satyanarayan Rice Mill.	—do—
61. „ Denan Rice Mill.	—do—
62. „ Deulia Rice Mill.	Deulia, Midnapur.
63. „ Srikrishna Rice Mill.	P.O. & Vill : Jakkore.
64. „ Khargpur Rice Mill.	Inda, Kharagpur, Midnapur.
65. „ Mahabir Rice Mill.	Puratan Bazar, Midnapur.
66. „ Gouranga Rice Mill.	Belda, Midnapur.
67. „ Sarbamangala Rice Mill	—do—
68. „ Sailendu Rice Mill.	—do—
69. „ Satyanarayan Rice Mill.	—do—
70. „ Lakshmi Narayan Rice Mill.	P.O. & Vill : Narayangarh, Dist : Midnapur.
71. „ Soroshi Rice Mill.	P.O. & Vill : Bakrabad, Dist : Midnapur.
72. „ Mahabir Rice Mill.	P.O. & Vill : Bakrabad, Dist : Midnapur.

**APPENDIX XI**  
(Chapter-V)  
**List of Cattle Markets**

Name of Subdivision	Name and distance of the place.	Name of the hats/Market.	Day or Days in which it is held.	Estimated annual arrivals of Live-stock.
Midnapur-Sadar. North.	<b>Panchkuri</b> P.O. —do— Bus stop about a furlong. Rly. Stn. 6 miles. (Midnapur Rly. Stn.)	Panchkuri Cattle Hat,	Only once in a week—Saturday.	Bullock—10,000 Cow — 3,000 Bull — 1,000 Buffalo— 600 Goat —10,000
—do—	<b>Amdubi</b> P.O. —do— Bus stop about a furlong. Rly. Stn. 13 miles. (Midnapur Rly. Stn.)	Amdubi Cattle Hat (Keshpur Police Station)	Only once in a week— Sunday.	Bullock— 1,000 Cow — 3,000 Bull — 500 Buffalo — Nil. Goat — 2,000
—do—	<b>Debcha</b> P.O. C.K. Rd. Bus stop about a furlong. Rly. Stn. 2 miles (C. K. Rd. Rly. Stn.)	Debcha Cattle Market.	Only once in a week— Tuesday.	Bullock— 2,000 Cow — 1,500 Bull — 1,000 Goat — 1,000
Ghatal.	<b>Krishnapur</b> P.O. —do— Bus stop about 4 miles— 16 miles Rly. Head (C.K. Rd.)	Krishnapur Cattle Market.	Only once in a week— Wednesday.	Bullock— 2,000 Cow — 1,000 Bull — 1,200 Goat — 1,000 Buffalo — 400
Jhargram.	<b>Chorchita.</b> P.O. —do— Bus stop about 1 mile. 20 miles off from Jhargram Rly. Stn. Binpur P.O. —do— Bus stop 1 mile Jhargram Rly. Stn. 12 miles.	Chorchita Hat.     Binpur hat	Only once in a week— Tuesday.    —do— Monday only	Bullock—10,000 Cow — 1,000 Bull — 1,200 Goat — 8,000 Buffalo— 3,000    —do—

Name of Subdivision.	Name and distance of the place	Name of the Hats/Market.	Day or Days in which it is held.	Estimated annual arrivals of Live-stock.
Tamluk.	Ranirhat. P.O. Pra'tap- pur $\frac{1}{4}$ mile. Bus stop about a mile. Rly. Stn. about 3 miles. (Panskura Rly. Stn.)	Ranirhat or Mauripukur Cattle Hat.	Only once in a week— Thursday.	Bullock— 9,000 Cow — 4,000 Bull — 1,500 Buffalo— 500 Goat — 8,000
—do—	Narghat. Adjacent to the Hat- Bus stop 2 miles- Rly. Stn. 25 miles (Kolaghat Rly. Stn.)	Narghat Cattle Hat.	Only once in a week— Wednesday,	Bullock— 4,000 Cow — 2,000 Bull — 700 Buffalo— 300 Goat — 25,000
Midnapur South.	Dhaneswar- pur. P.O. Gomunda, about 3 miles. Bus stop. 3 Miles. Rly. Station about 8 miles (Danton)	Dhaneswarpur Hat.	Each Thurs- day.	Bullock— Nil. Cow — 12,000  Bull — Nil.
—do—	Tengra. P.O. Nim- pura. Rly. Stn. Kharag- pur 4 Miles distance. Bus stop Kharagpur 4 Miles.	Tengra Hat.	Thursday & Sunday.	Bullock— Nil Cow — 9,000

## APPENDIX—XII

### LIST OF IMPORTANT FAIRS & MELAS

Sl. No.	J. L. No.	Name of the place where Mela or Fair is held	Time when it is held	Local religious or occasion of the Mela	Duration	Average total attendance
<b>Thana : Kharagpur Local</b>						
1.	247	Gholgharia	April	Kalipuja	2 Days	3,000
2.	573	Bhandaria	April	Kalipuja	2 "	1,000
3.	...	Malancha	July	Rathajatra	8 "	1,000
4.	13	Andharia	February	Maghipurnima	2 "	500
5.	531	Sreerampur	March	Dolepurnima	2 "	1,500
6.	...	Mawa	March	Kalipuja	1 Day	1,200
7.	384	Balarampur	July	Rathajatra	2 Days	700
<b>Thana : Narayangarh</b>						
8.	326	Deula	January	Makarsankranti	1 Day	2,000
9.	...	Mamansa	"	"	1 "	2,000
10.	...	Turna	"	"	1 "	2,000
11.	...	Kasba	February	Maghipurnima	2 Days	4,500
12.	439	Baipur	"	Shibratri	2 "	2,500
13.	315	Beldabazar	October	Durgapuja	4 "	2,500
14.	...	Narayangarh	February	Maghipurnima	1 Day	2,000
15.	480	Bhadrakali	April	Charak	2 Days	3,000
16.	...	Reddipur	"	"	1 Day	1,000
17.	350	Paktapole	"	"	1 "	1,000
18.	...	Narayangarh	June	Chaitrasankranti	1 "	1,000
19.	...	Babulpur	April	Charak	1 "	1,000
20.	315	Belda	June	Rathajatra	1 "	2,000
21.	...	Sanpia	November	Rash	7 Days	600
22.	390	Agarara	September	Durgapuja	4 "	500
23.	384	Mohanpur	June	Snanjatra	1 Day	1,000
24.	384	"	"	Rathajatra	1 "	5,000
25.	384	"	July	Utarath	1 "	4,000
26.	...	Baitabazar	April	Barwari		
				Kalipuja	15 Days	2,000
27.	...	Kharisha	"	Charakpuja	12 "	300
<b>Thana : Pingla</b>						
28.	...	Gopinathpur	April	Agnipuja	1 Day	200
29.	...	Kanta Pukur	February	Maghipurnima	2 Days	5,000
30.	38	Pingla	April	Harimela	4 "	400
31.	106	Dhaneswarpur	"	"	2 "	500
32.	77	Kalika Kundua	"	Charakmela	4 "	4,000
<b>Thana : Sabong</b>						
33.	293	Sabong	October	Durgapuja	4 "	1,000
34.	248	Tilantapara	November	Raspujima	5 "	2,000

Sl. No.	J. L. No.	Name of the place where Mela or Fair is held	Time when it is held	Local religious or occasion of the Mela	Duration	Average total attendance
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					Days	
35.	398	Shitalda	February	Shibratri	4 "	1,000
36.	407	Bishnupur	October	Durgapuja	4 "	1,000

**Thana : Danton**

37.	250	Kedar	February	Shibratri	2 Days	1,000
38.	120	Sharashanka	January	Religious	1 Day	2,000
39.	...	Thakurgharah	July	Rathajatra	2 Days	4,200

**Thana : Sutahata**

40.	77	Gunageria	January	Madhab Mela	14 "	2,000
41.	...	Basudebberiya	March	Dol Mela	2 "	1,500
42.	84	Basulya	April	Gajanmela	5 "	1,000
43.	60	Barabaria	May	Gangaswar Mela	6 "	4,000

**Thana : Tamluk**

44.	22	Bansda	February	Maghipurnima	3 "	4,000/5,000
45.	...	Chimutia	April	Nilratri	1 Day	2,000
46.	21	Sahara	February	Bhim Ekadashi	2 Days	500
47.	...	Dihimari	March	Chaitrasankranti	2 "	2,100
48.	16	Balluk	November.	Rathajatra	2 "	1,500
49.	...	Dehimari	July	do	2 "	1,200
50.	61	Sayadighi	April	Ganga Baruni	8 "	1,000
51.	...	Ramtarak Hat	October	Durgapuja	4 "	1,000
52.	...	Radhamoni				
		Bazar	"	"	4 "	2,000
53.	...	Kelomal	"	"	4 "	2,000
54.	...	Dhanichak	March	Holi-purnima	2 "	2,000
55.	...	Nilhanpur	March	"	2 "	500
56.	152	Jogikhop	November	Rash "	5 "	5,000
57.	294	Kulberia	February	Bhim Ekadashi	4 "	2,000

**Thana : Moyana**

58.	...	Garsfat	October	Utthan Ekadashi	7 "	3,000
59.	196	Jaigirchak	February	Bhim Ekadashi	2 "	1,000
60.	210	Purb Dakshin				
		Moyana	"	Kalipuja	8 "	3,000
61.	235	Ijamlichak	"	Bhim Ekadashi	5 "	1,500
62.	207	Garmoyna	March	Dolejatra	1 Day	4,000
63.	212	Anandpur	"	Panchamdole	1 "	2,000
64.	225	Gojina	February	Rash Purnima	9 days	4,000
65.	177	Gokulnagar	April	Charak	3 "	4,000

**Thana : Panskura**

66.	333	Raghunathbari	September	Bijoya Dasami	1 day	4,000
67.	...	Degunbari	May	Falaharinipuja	4 days	800
68.	...	Siddhikundi	January	Pous Sankranti	3 "	1,800
69.	29	Jashara	March	Dolejatra	3 "	1,600

Sl. No.	J. L. No.	Name of the place where Mela or Fair is held	Time when it is held	Local religious or occasion of the Mela	Duration	Average total attendance
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70.	20	Deulia	September	Dharmasankranti	4 „	2,700
71.	108	Brindabanchak	October	Durgapuja	4 „	3,000

**Thana : Mahisadal**

72.	...	Mahisadal	June & July	Rath	8 „	50,000
73.	152	Rambag	„	„	1 „	1,000
74.	...	Kadamara	February	Maghipurnima	2 „	2,000
75.	61	Kanchi	„	„	2 „	5,000

**Thana : Nandigram**

76.	130	Reyanpara	February	Shibratri	7 „	20,000
77.	130	„	April	Charakpuja	1 „	1,500
78.	...	Amgachia	„	„	2 „	6,000
79.	...	Sarusabad	October	Maharrum	1 „	12,000
80.	180	Nandigram	January	Pous Sankranti	1 „	2,000
81.	...	Bamarasa	April	Madhupurnima	2 „	1,700
82.	58	Baroj	April	„	2 „	12,000
83.	164	Basulichak	September	Basulimela	4 „	12,000
84.	170	Bhekutya	April	Charakpuja	1 „	3,000
85.	61	Bamun Arah	September	Durgamela	4 „	8,000
86.	80	Amdabad	January	Pous Sankranti	1 „	5,000
87.	61	Bamun Arah	September	Durgamela	4 „	20,000
88.	135	Rukminipur	March	Madhupurnima	2 „	3,000
89.	227	Shimulcunda	February	Shibratri	1 „	16,000
90.	227	„	September	Durgamela	4 „	7,000
91.	185	Mohammadpur	February	Shibchaturdashi	8 „	5,000
92.	12	Purushottam- pur	September	Durgamela	4 „	7,000

**Thana : Egra**

93.	...	Egra Bazar	February	Shibratri	7/8 „	8,000/10,000
94.	...	„	March	Basantipuja	7/8 „	8,000/10,000
95.	39	Koudi	March	ChitraSankranti	7/8 „	8,000/10,000
96.	...	Balighai	June	Barwari Puja	7/8 „	8,000/10,000
97.	...	Rajsal	June	Rathajatra	2 „	5,000
98.	...	Hatnagar	February	Shibratri	5 „	10,000
99.	70	Basudevpur	July	Rathajatra	2 „	5,000
100.	...	Amalgaria	„	Janmasthami	12 „	15,000
101.	121	Barda	September	Durgapuja	4 „	3,000
102.	203	Pani Parul	March	Chaitra Gajan	5 „	5,000
103.	...	Panchelgarh	November	Rashpurnima	8 „	6,000
104.	134	AmarshiKasba	January	Chandra Nil	15 „	8,000
105.	36	Gopalpur	October	Durgapuja	4 „	2,000
106.	11	Naipur	July	Rathajatra	2 „	1,900
107.	31	Tepapara	„	„	2 „	1,500
108.	11	Tulshichara	January	Pous-Sankranti	2 „	1,500

**Thana : Bhagawanpur**

109.	...	Bhimeswari	January	Pous-Sankranti	2 „	2,000
110.	261	Khanjadapur	„	„	3 „	5,000



Sl. No.	J. L. No.	Name of the place where Mela or Fair is held,	Time when it is held.	Local religious or occasion of the Mela.	Duration.	Average total attendance
111.	112	Purba Masuria	March	Chaitrasankranti	1 "	955
112.	28	Gurgram	November	Rashjatra	6 "	1,800
113.	...	Shib Bazar	March	Gajan	1 "	1,000

**Thana : Contai**

114.	...	Junepur	January	Pous-Sakranti	1 "	1,000
115.	41	Nachinda	May	Akshoy Tiritiya	11 "	30,000
116.	210	Mukundapur	October	Durgapuja	5 "	1,900

**Thana : Mohanpur**

117.	384	Baitabazar	April	Baroari Kali-puja	15 "	2,000
118.	384	Kharisa	"	Charakpuja	12 "	300
119.	390	Sanpia	November	Rash	7 "	600

**Thana : Jhargram**

120.	...	Old Jhargram	August	Indraparba Mela	9 "	2,000
121.	...	"	September	Durgapuja	4 "	500
122.	811	Chundri	January	Makar	4 "	300

**Thana : Nayagram**

123.	...	Birkada	February	Kumarsahib	5 "	5,000
124.	981	Daulbar	April	Baruni Charak	7 "	500
125.	1246	Nayagram	September	Durgapuja	4 "	5,000
126.	1220	Jamirapaul	January	Makar	7 "	2,000

**Thana : Sankrail**

127.	...	Gar Rohini	October	Durga Puja	4 days	3,200
128.	...	Pitalkhathi	—do—	Joychandi Mela	2 "	3,000

**Thana : Jamboni**

129.	112	Gidney	—do—	Kali Puja	7 "	2,000
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**Thana : Binpur**

130.	371	Laschhipur	January	Ekhan Mela	2 "	500
131.	790	Lalgarh	—do—	—do—	2 "	500
132.	136	Belpahari	September	Indra Mela	1 "	1,000

**Thana : Gopiballavpur**

133.	564	Belaberia	November	Rash Purnima	3 "	3,000
134.	370	Malincha	January	Pous Sankranti	2 "	2,000

**Thana : Ghatal**

135.	...	Ghatal Town	May	Sitala Puja	1 "	1,000
136.	...	—do—	June	Gambhir Sitalapuja	2 "	1,000

Sl. No.	J. L. No.	Name of the place where Mela or Fair is held	Time when it is held	Local religious or occasion of the Mela	Duration	Average total attendance
<b>Thana : Daspur</b>						
137.	17	Nij Narajole	July	Rathajatra	8 „	3,000
138.	...	Chechua	January	Maghi Purnima	7 „	1,000
<b>Thana : Chandrakona</b>						
139.	27	Srinagar	January	Maghi Purnima	8 „	2,500
140.	279	Dingal	„	„	8 „	2,600
141.	103	Chandrakona Town	July	Rathajatra	8 „	2,600
<b>Thana : Potashpur</b>						
142.	...	Panchelgarh	November	Rash Purnima	8 „	6,000
143.	134	Amarshi Kasba	January	Chandra Nil	15 „	8,000
144.	36	Gopalpur	October	Durgapuja	4 „	2,000
<b>Thana : Ramnagar</b>						
145.	...	Mirgodaganj	October	Kalipuja	7 „	3,000
146.	...	Bhutnathpur	„	Bhutupuja	2 „	2,000
147.	226	Kalindi	January	Pous-Sankranti	4 „	1,000
148.	62	Magipur	October	Kalipuja	3 „	1,000
<b>Thana : Khejuri</b>						
149.	...	Jorarnagar	January	Birth Ceremony of Netaji Subhas	7 „	12,000
150.	...	Krishnanagar	April	Bose Kalipuja	7 „	2,500
<b>Thana : Garbeta</b>						
151.	...	Bagri (Krishnanagar)	1st March	Doljatra & Ratha Jatra	3 „	6,000
152.	763	Kenkator	March	Chaitrasankranti	3 „	2,500
153.	746	Rashkundu	April	Shib Mela	3 „	1,800
<b>Thana : Midnapur</b>						
154.	...	Bela (in UB-II)	February	Sankrantipuja	7 „	500
<b>Thana : Debra</b>						
155.	230	Chandipur	December & January	Kedar Mela	15 „	5,000
156.	260	Satyapur	April	Gajan of God Shiva	15 „	2,000
<b>Thana : Salboni</b>						
157.	524	Karnagarh	January	Barang Puja	2 „	3,000
158.	...	Meghakham	February	Sankranti Puja	1 „	2,500
<b>Thana : Keshpur</b>						
159.	81	Kanasole	April	Gajan	7 „	5,000
160.	421	Rokhakali	May	Nemai Puja	2 „	2,500
161.	447	Dhalhara	April	Gajan	8 „	2,500

# Midnapore District Hand Book.

## ERRETA

Page No.	Line No.	Incorrect.	Correct,
1	33	Centuries	Century
2	26	Characteristic	Characteristics
2	43	9'33	9'60
15	22	a	an
27	6	is far	is by far
35	5	apportune	opportune
56	6	Mahindra Kumar	Mahendra Nath
58	15	Labjee Madhabjee	Lavjee Madhabjee
58	35	are	and
59	Table-0	Variation in Prices 1959 (in rupees)	Variation in Prices 1959 (in rupees) per md.
59	34	Khrshari	Kheshari
60	3	is	are
64	18	of	off
64	33	50	75
66	12	Nandapore	Anandapur
71	5	Sole Pata	Solepatta
71	6	Sonakamia	Sonakania
71	7	Harin Mung	Harimung
72	4	D. T. Road	O. T. Road
75	1	Dhema	Dherua
"	13	Tarapara	Turapara
"	17	Salpati	Satpati
"	28	Maghasan	Mugbasan
"	30	Tegharai	Teghari
"	31	Amrakadi	Amrakuchi
"	35	Sarishakhela	Sarishakhola
76	8	Goaltore	Goaltore
"	22	Kharkashma	Kharkushma
"	23	Rashkanda	Ôashkundu
"	44	Bhemva	Bhemua
"	52	Miligram	Maligram
77	1	Khroi	Khrai
"	14	Lechmapur	Lachhmapur
"	32	Tatranga	Tutanga

Page No.	Line No.	Incorrect.	Correct.
77	85	Parumda	Parulda
„	47	Tarkagarh	Turkagarh
91	16	Samsonka	Sarsanka
In Page No. 18 'Table—“M” has been omitted : (Which is incorporated here)			
102	11	Kolabaria	Kalabaria
„	25	Sardullachak	Sadullachak
„	34	Balisai hat.	Balisai market
103	23	Fichaboni hat.	Pichaboni hat.
106	4	Madhupur	Madhpur
107	11	Pirakota	Pirakata
„	21	Goalgram	Golagram
112	Last line.	Roulice, Amlagora.	Amlagora,

District Agricultural Marketing  
Officer, Midnapore (West)

TABLE—M

Population of the District Midnapore,

Total Population 334, 286		Scheduled Castes		Scheduled Tribes		Literate and Educated persons	
Males	Females	Males	Females	Males	Females	Males	Females
182,687	151,599	16,653	15,453	2,544	2,635	105,689	49,736

according to Census of India Part I of 1962

Total workers		As cultivators		As Agricultural labours	
Males	Females	Males	Females	Males	Females
85,151	8,130	4,870	244	3,613	655

## APPENDIX B

### List of Graphical Sketch etc.

Price Graph of Paddy for the year 1951-52 to 1961-62.

Price Graph of Rice for the year 1951-52 to 1961-62.

Price Graph of Potato for the year 1951-52 to 1961-62.

Price Graph of Cashewnut for the year 1951-52 to 1961-62.

Price Graph of Jute for the year 1951-52 to 1961-62.

Price Graph of Betel leaves for the year 1951-52 to 1961-62.

Graphical Representation by Bar of "Paddy" in the district of Midnapore.

Graphical Representation by Bar of Production of Agricultural Commodity (Paddy) in the district of Midnapore—Aman Paddy.

Graphical Representation by Bar of Production of Agricultural Commodity (Potato) in the district of Midnapore.

Graphical Representation by Bar of Production of Agricultural Commodity Potato in the district of Midnapore.

Graphical Representation by Bar of Production of Agricultural Commodity (Jute) in the district of Midnapore.

Graphical Representation by Bar of Production of Agricultural Commodity (Jute) in the district of Midnapore.

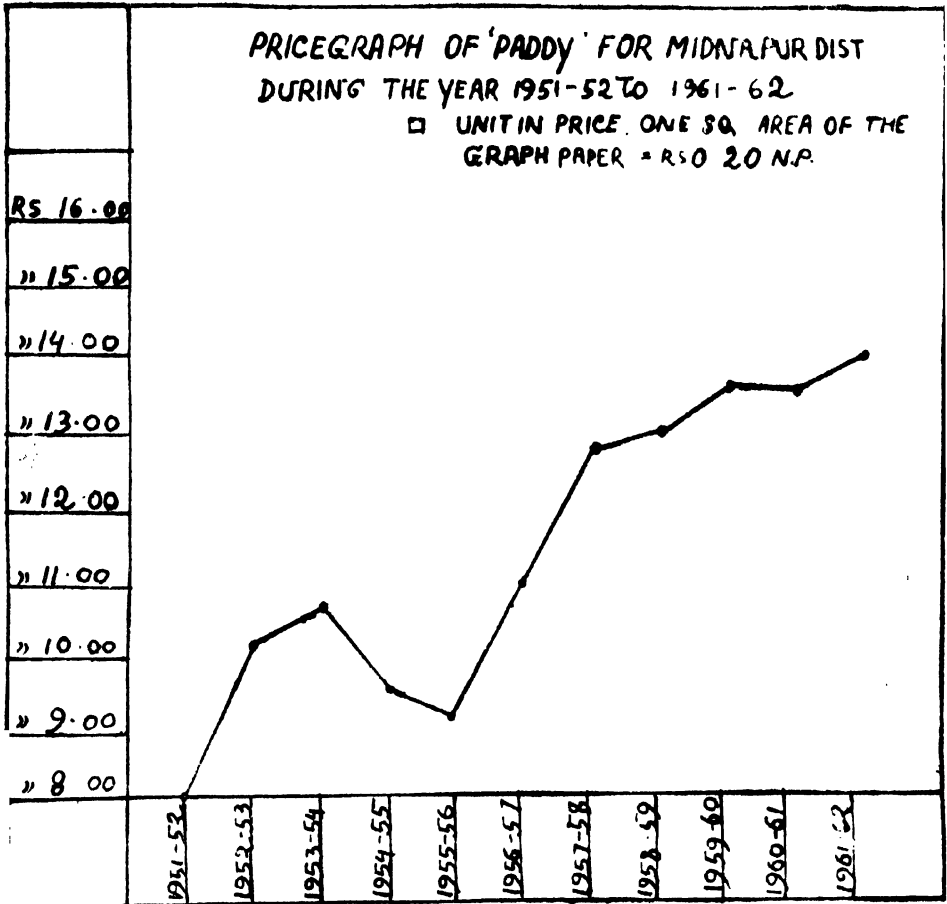
Graphical Representation by Bar of Production of Agricultural Commodity (Cashewnut) in the district of Midnapore.

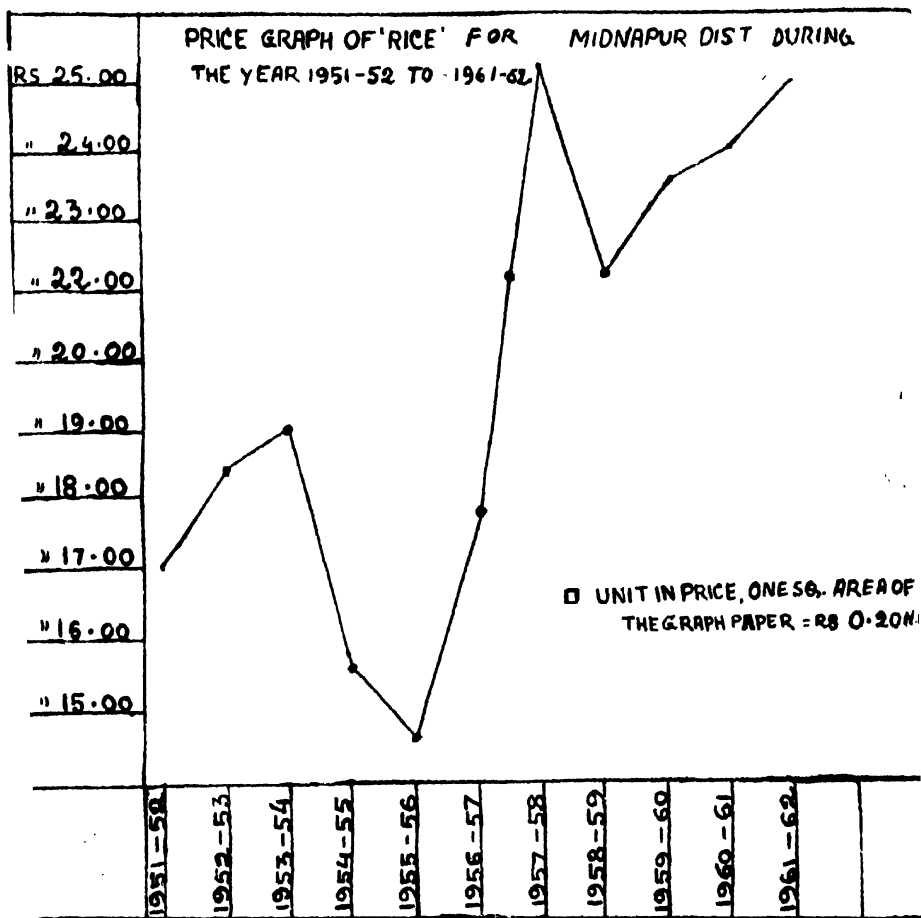
Graphical Representation by Bar of Production of Agricultural Commodity (Cashewnut) in the district of Midnapore.



## APPENDIX-B

## Graphs &amp; Charts







# PRICE GRAPH OF 'POTATO' FOR MIDNAPUR DIST.

DURING THE YEAR 1951-52 TO 1961-62

■ UNIT IN PRICE, ONE SQ. AREA OF GRAPH  
PAPER = RS. : 0.20

RS. 18.00

" 17.00

" 16.00

" 15.00

" 14.00

" 13.00

" 12.00

" 11.00

" 10.00

" 9.00

1951-52

1952-53

1953-54

1954-55

1955-56

1956-57

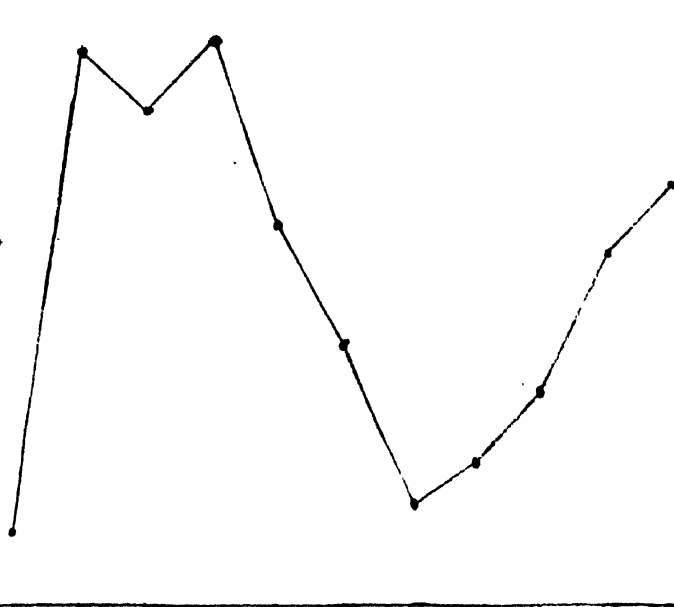
1957-58

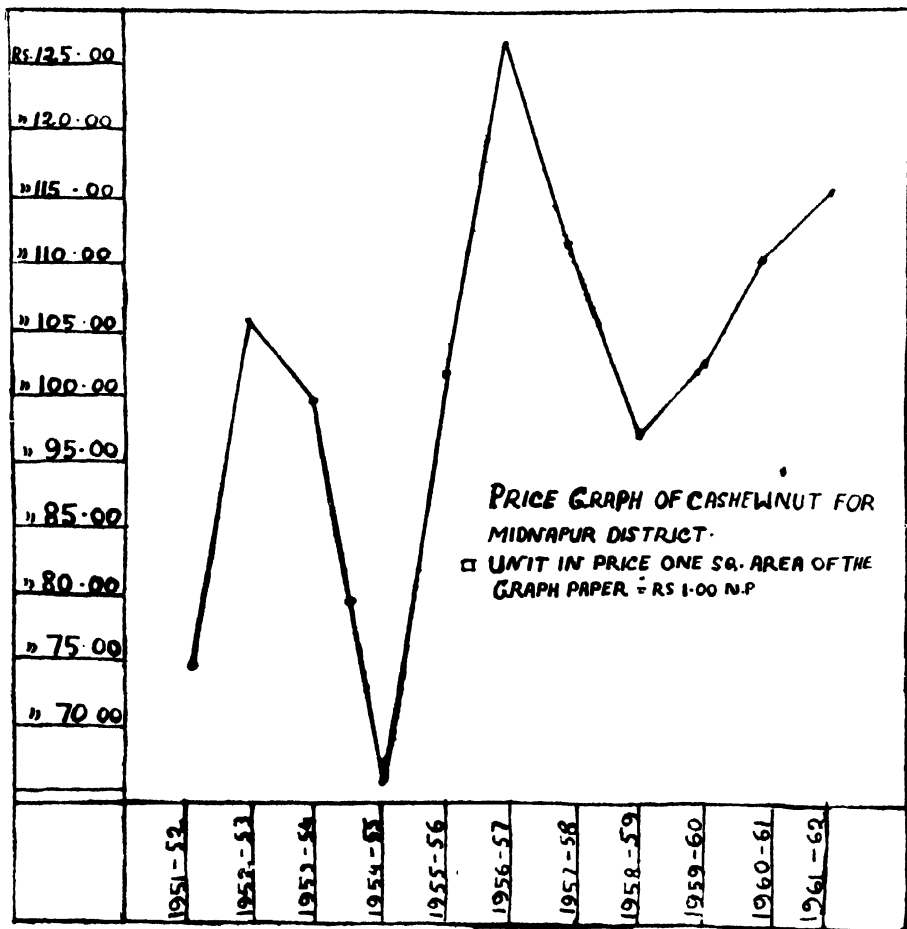
1958-59

1959-60

1960-61

1961-62



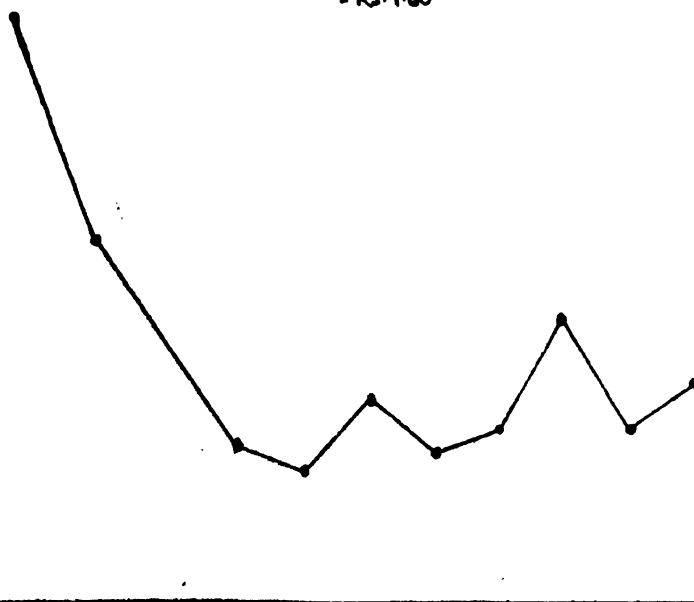


# PRICE GRAPH OF JUTE FOR MIDNAPUR DURING THE YEAR 1951-52 TO 61-62

■ UNIT IN PRICE, ONE SQ. AREA OF GRAPH PAPER:  
= RS. 1.00

RS 60.00  
" 55.00  
" 50.00  
" 45.00  
" 40.00  
" 35.00  
" 30.00  
" 25.00  
" 20.00  
" 15.00

1951-52  
1952-53  
1953-54  
1954-55  
1955-56  
1956-57  
1957-58  
1958-59  
1959-60  
1960-61  
1961-62



PRICE GRAPH OF 'BETELLEAVES' OF MIDNAPUR  
DIST. DURING THE YEAR 1951-52 TO 1961-62.

□ UNIT IN PRICE, ONE SQ. AREA OF THE GRAPH  
PAPER = RS 0.20 N.P

Rs 10.00

» 9.00

» 8.00

» 7.00

» 6.00

» 5.00

» 4.00

» 3.00



1951-52

1952-53

1953-54

1954-55

1955-56

1956-57

1957-58

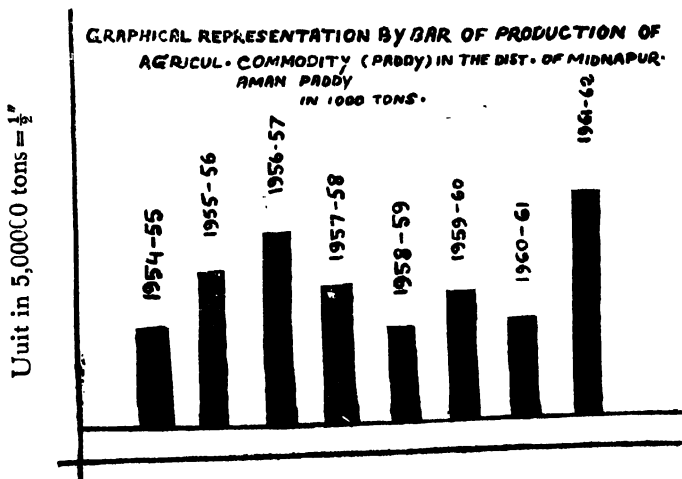
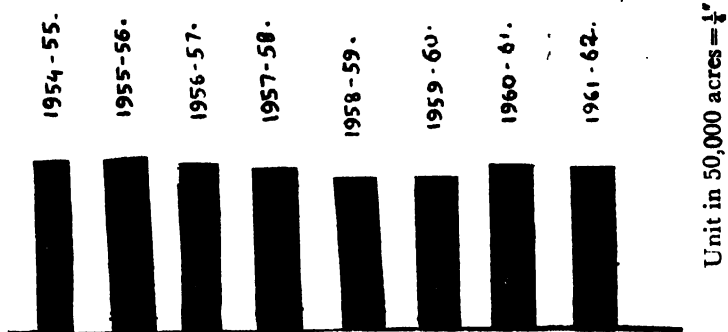
1958-59

1959-60

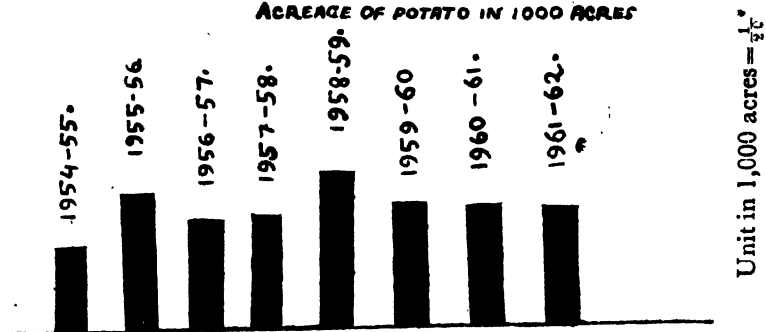
1960-61

1961-62

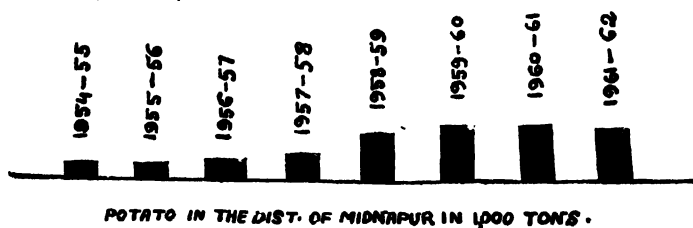
GRAPHICAL REPRESENTATION BY BAR OF 'PADDY' IN THE  
DIST. OF MIDNAPUR.  
ACREAGE OF AMAN (PADDY) IN 1000 ACRES.



**GRAPHICAL REPRESENTATION BY BAR OF 'POTATO'**  
**IN THE DIST. OF MIDNAPUR.**  
**ACREAGE OF POTATO IN 1000 ACRES**

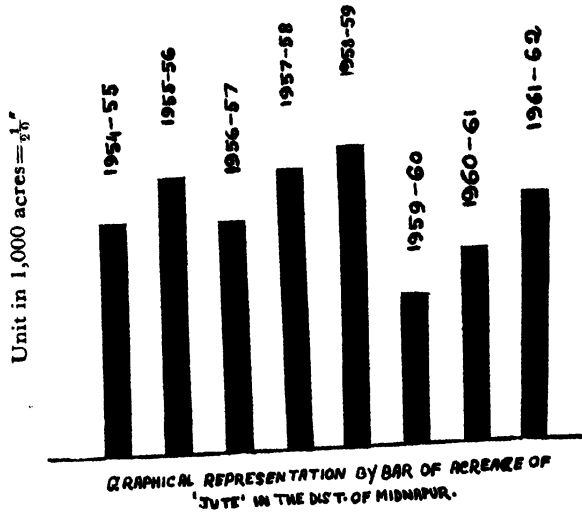


**GRAPHICAL REPRESENTATION BY BAR OF PRODUCTION.**  
**AGRICUL. COMMODITY (POTATO) IN THE DIST OF**  
**MIDNAPUR.**

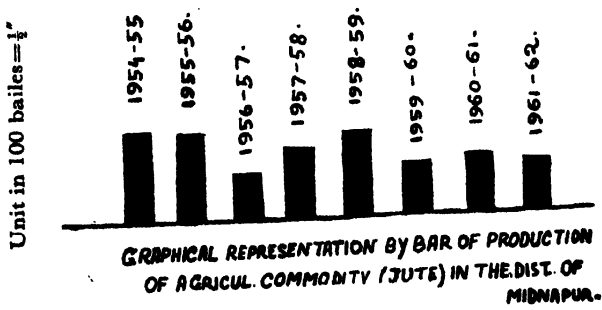


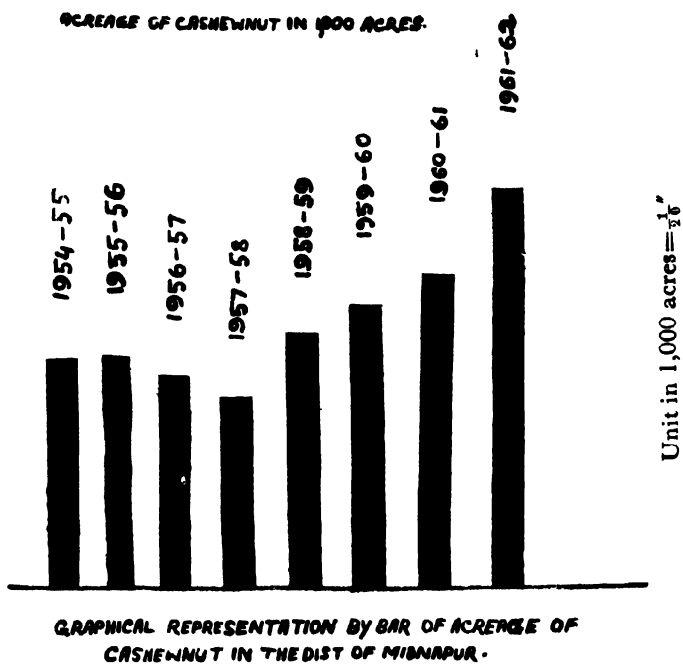
Unit in 1,000 tons =  $\frac{1}{20}$

# ACREAGE OF JUTE IN 1000 ACRES.



# JUTE IN THE DIST. OF MIDNAPUR IN 1000 BALES

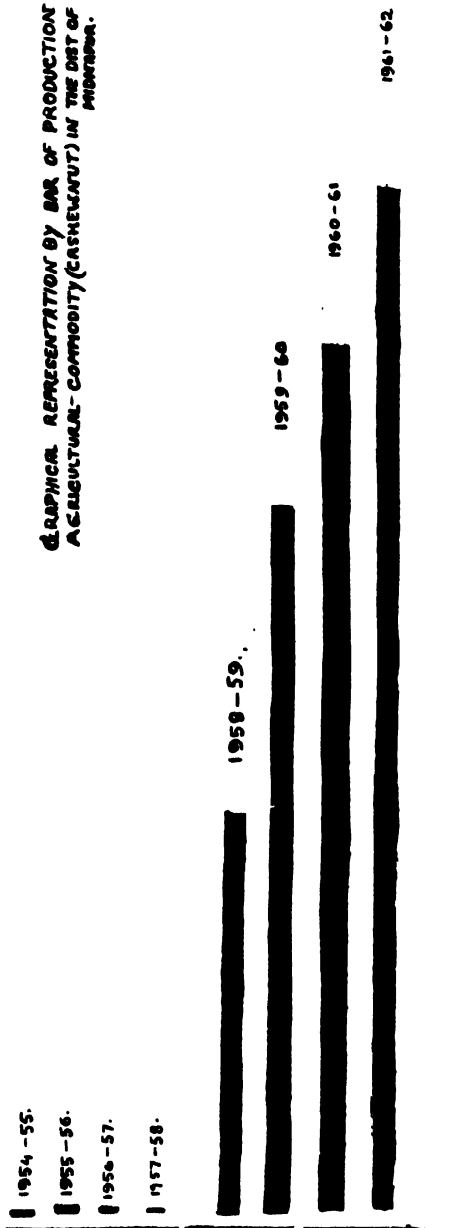






GRAPHICAL REPRESENTATION BY BAR OF PRODUCTION OF  
 AGRICULTURAL-COMMODITY(CASHEW-NUT) IN THE DIST OF  
 MIDNAPUR.

CASHEW-NUT IN THE DIST OF  
 MIDNAPUR IN 1000 TONS



Unit in 1,000 tons= $\frac{1}{10}$



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Besides, office records and files of different offices under the Agriculture Directorate have also been consulted.





